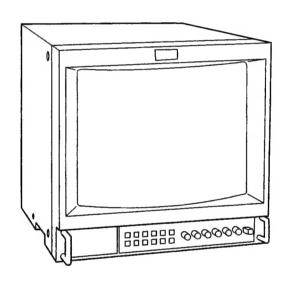
SERVICE MANUAL

 MODEL	DEST.	CHASSIS NO.	MODEL	DEST.	CHASSIS NO.
PVM-14M2U	US Canadian	SCC-G61J-A	PVM-14M4E	AEP	SCC-G62F-A
PVM-14M4U	US Canadian	SCC-G61G-A	PVM-14M2A	Australian	SCC-N17A-A
PVM-14M2E	AEP	SCC-G62HA	PVM-14M4A	Australian	SCC-N17B-A





TrinitronPVM-14M2U/14M2E

TRINITRON® COLOR VIDEO MONITOR

SONY

SPECIFICATIONS

Video signal

For PVM-14M4U/14M4E/20M4U/20M4E:

Color system

NTSC, PAL, SECAM, NTSC4.43

Resolution

800 TV lines Aperture correction 0 dB to +6 dB

Frequency response

LINE

10 MHz ± 3 dB (Y signal)

RGB

 $10 \text{ MHz} \pm 3 \text{ dB}$

AFC time constant 1.0 msec. Synchronization For PVM-14M2U/14M2E/20M2U/20M2E:

Color system

NTSC, PAL, SECAM, NTSC4.43

Resolution

600 TV lines

Aperture correction 0 dB to +6 dB

Frequency response

LINE

 $10 \text{ MHz} \pm 3 \text{ dB (Y signal)}$

RGB

 $10 \text{ MHz} \pm 3 \text{ dB}$

Synchronization

AFC time constant 1.0 msec.

Picture performance

For PVM-14M4U/14M4E/14M2U/14M2E:

Normal scan

7 % over scan of CRT effective screen

area

Under scan

5 % underscan of CRT effective screen

area

H. linearity

Less than 4.0 % (typical) Less than 4.0 % (typical)

V. linearity

Convergence

Central area:

0.4 mm (typical)

Peripheral area: 0.5 mm (typical)

Raster size stability H: 1.0%, V: 1.5%

High voltage regulation

3.5 %

Color temperature

D65/D93, selectable

USER (3,200K-10,000K, factory

setting is D65)

For PVM-20M4U/20M4E:

Normal scan

7 % over scan of CRT effective screen

area

Under scan

5 % underscan of CRT effective screen

H. linearity

Less than 5.0 % (typical)

V. linearity

Less than 5.0 % (typical)

Convergence

Central area:

0.5 mm (typical)

Peripheral area: 0.7 mm (typical)

Raster size stability H: 1.0%, V: 1.5%

High voltage regulation

4.0 %

Color temperature

D65/D93, selectable

USER (3,200K-10,000K, factory

setting is D65)

For PVM-20M2U/20M2E

Normal scan

7 % over scan of CRT effective screen

агеа

Under scan

5 % underscan of CRT effective screen

H. linearity

Less than 5.0 % (typical)

V. linearity

Less than 5.0 % (typical)

Convergence

Central area:

0.6 mm (typical)

Peripheral area: 1.0 mm (typical) Raster size stability H: 1.0%, V: 1.5%

High voltage regulation

4.0 %

Color temperature

D65/D93, selectable

USER (3,200K-10,000K, factory

setting is D65)

Inputs

For PVM-14M4U/14M4E/20M4U/20M4E:

LINE A/B

VIDEO IN

BNC connector (×2), 1Vp-p ±6 dB,

sync negative

Automatic 75 ohms termination

AUDIO IN

Phono jack (\times 2), -5 dBu^{a)}, more than

47 kilo-ohms

LINE C

Y/C IN 4-pin mini-DIN (×1)

See the pin assignment on page 19.

AUDIO IN

Phono jack (×1), -5 dBua), more than

47 kilo-ohms

RGB/COMPONENT

R/R-Y,G/Y,B/B-Y IN: BNC connector (×3)

R, G, B channels: 0.7 Vp-p, ±6 dB

Sync on green: 0.3 Vp-p, negative

R-Y, B-Y channels: 0.7 Vp-p, ±6 dB

Y channel: 0.7 Vp-p, ±6 dB

(Standard color bar signal of 75%

chrominance)

Automatic 75 ohms termination

AUDIO IN Phono jack (×1), -5 dBua), more than

47 kilo-ohms

EXT SYNC IN

BNC connector (×1) 4 Vp-p, ±6 dB, sync negative

REMOTE 20-pin connector (×1)

See the pin assignment on page 19.

a) 0 dBu = 0.775 Vr.m.s.

For PVM-14M2U/14M2E/20M2U/20M2E: General LINE A/B For PVM-14M4U: VIDEO IN BNC connector (x2), 1 Vp-p CRT SMPTE-C phosphor ± 6dB, sync negative Power consumption 90 Wh (with SDI: 99 Wh) Automatic 75 ohms termination Power requirements 120 V AC, 50/60Hz Phono jack (\times 2), -5 dBu^{a)}, more than **AUDIO IN** Operating temperature 47 kilo-ohms 0 to $+35^{\circ}$ C (32 to 95° F) LINE C Storage temperature -10 to +40°C (14 to 104°F) Y/C IN 4-pin mini-DIN (×1) Operating humidity 35 to 85% (no condensation) See the pin assignment on page 19. Storage humidity 0 to 90% Phono jack ($\times 1$), -5 dBu^a), more than AUDIO IN Dimensions (w/h/d) Approx. $346 \times 340 \times 431 \text{ mm}$ 47 kilo-ohms $(13\frac{5}{8} \times 13\frac{1}{2} \times 17 \text{ inches})$ RGB/COMPONENT not incl. projecting parts and controls R/R-Y,G/Y,B/B-Y IN: BNC connector (×3) Mass Approx. 16.7kg (36 lb 13 oz) R, G, B channels: 0.7 Vp-p ± 6dB Accessory supplied AC power cord (1) Sync on green: 0.3 Vp-p negative AC plug holder (1) R-Y, B-Y channel: 0.7 Vp-p ± 6dB Tally label (1) Y channel: 0.7 Vp-p ± 6dB Cable with a 20-pin connector (1) (Standard color bar signal of 75% chrominance) For PVM-14M4E: Automatic 75 ohms termination CRT EBU phosphor AUDIO IN Phono jack ($\times 1$), -5 dBu^a), more than Power consumption 90 Wh (with SDI: 99 Wh) 47 kilo-ohms Power requirements 100 to 240 V AC, 50/60Hz EXT SYNC IN BNC connector (×1) Operating temperature 4 Vp-p, ±6 dB, sync negative 0 to $+35^{\circ}$ C (32 to 95° F) REMOTE 20-pin connector (×1) Storage temperature -10 to +40°C (14 to 104°F) See the pin assignment on page 19. Operating humidity 35 to 85% (no condensation) Storage humidity 0 to 90% a) 0 dBu = 0.775 Vr.m.s.Dimensions (w/h/d) Approx. $346 \times 340 \times 431$ mm $(13\frac{5}{8} \times 13\frac{1}{2} \times 17 \text{ inches})$ not incl. projecting parts and controls Approx. 16.7kg (36 lb 13 oz) Mass Outputs (common to all models) Accessory supplied AC power cord (1) LINE A/B AC plug holder (1) VIDEO OUT BNC connector (×2) loop-through, Tally label (1) Automatic 75 ohms termination Cable with a 20-pin connector (1) **AUDIO OUT** Phono jack (×2) loop-through For PVM-14M2U: LINE C Y/C OUT 4-pin mini-DIN (×1) loop-through, P-22 phosphor Automatic 75 ohms termination Power consumption 90 Wh (with SDI: 99 Wh) Power requirements 120 V AC, 50/60Hz **AUDIO OUT** Phono jack (×1) loop-through Operating temperature RGB/COMPONENT R/R-Y,G/Y,B/B-Y OUT: BNC connector (×3) 0 to +35°C (32 to 95°F) Storage temperature -10 to +40°C (14 to 104°F) loop-through Operating humidity 35 to 85% (no condensation) Automatic 75 ohms termination **AUDIO OUT** Phono jack (×1) loop-through Storage humidity 0 to 90% **EXT SYNC OUT** BNC connector (x1) Dimensions (w/h/d) Approx. $346 \times 340 \times 431$ mm Automatic 75 ohms termination $(13\frac{5}{8} \times 13\frac{1}{2} \times 17 \text{ inches})$ Output level: 0.8 W Speaker output not incl. projecting parts and controls

Mass

Approx. 16.7kg (36 lb 13 oz)

Cable with a 20-pin connector (1)

AC plug holder (1) Tally label (1)

Accessory supplied AC power cord (1)

For PVM-14M2E:

CRT P-22 phosphor

Power consumption 90 Wh (with SDI: 99 Wh) Power requirements 100 to 240 V AC, 50/60Hz

Operating temperature

 $0 \text{ to } +35^{\circ}\text{C} (32 \text{ to } 95^{\circ}\text{F})$

Storage temperature -10 to +40°C (14 to 104°F) Operating humidity 35 to 85% (no condensation)

Storage humidity 0 to 90%

Dimensions (w/h/d) Approx. $346 \times 340 \times 431$ mm

 $(13\frac{5}{8} \times 13\frac{1}{2} \times 17 \text{ inches})$

not incl. projecting parts and controls

Mass Approx. 16.7kg (36 lb 13 oz)

Accessory supplied AC power cord (1)

AC plug holder (1) Tally label (1)

Cable with a 20-pin connector (1)

For PVM-20M4U:

CRT SMPTE-C phosphor

Power consumption 125 Wh (with SDI: 135 Wh)

Power requirements 120 V AC, 50/60Hz

Operating temperature

0 to $+35^{\circ}$ C (32 to 95° F)

Storage temperature -10 to +40°C (14 to 104°F) Operating humidity 35 to 85% (no condensation)

Storage humidity 0 to 90%

Dimensions (w/h/d) Approx. $450 \times 458 \times 503$ mm

 $(17^{3}/4 \times 18^{1}/8 \times 19^{7}/8 \text{ inches})$

not incl. projecting parts and controls

Mass Approx. 30.0 kg (66 lb 2 oz)

Accessory supplied AC power cord (1)

AC plug holder (1) Tally label (1)

Cable with a 20-pin connector (1)

For PVM-20M4E:

CRT EBU phosphor

Power consumption 130 Wh (with SDI: 140 Wh) Power requirements 100 to 240 V AC, 50/60Hz

Operating temperature

0 to +35°C (32 to 95°F)

Storage temperature -10 to +40°C (14 to 104°F) Operating humidity 35 to 85% (no condensation)

Storage humidity 0 to 90%

Dimensions (w/h/d) Approx. $450 \times 458 \times 503$ mm

 $(17^{3/4} \times 18^{1/8} \times 19^{7/8} \text{ inches})$

not incl. projecting parts and controls

Mass Approx. 30.0 kg (66 lb 2 oz)

Accessory supplied AC power cord (1)

AC plug holder (1) Tally label (1)

Cable with a 20-pin connector (1)

For PVM-20M2U:

CRT P-22 phosphor

Power consumption 115 Wh (with SDI: 125 Wh)

Power requirements 120 V AC, 50/60Hz

Operating temperature

0 to +35°C (32 to 95°F)

Storage temperature -10 to +40°C (14 to 104°F) Operating humidity 35 to 85% (no condensation)

Storage humidity 0 to 90%

Dimensions (w/h/d) Approx. $450 \times 458 \times 503$ mm

 $(17^{3}/4 \times 18^{1}/8 \times 19^{7}/8 \text{ inches})$

not incl. projecting parts and controls

Mass Approx. 30.0 kg (66 lb 2 oz)

Accessory supplied AC power cord (1)

AC plug holder (1) Tally label (1)

Cable with a 20-pin connector (1)

For PVM-20M2E:

CRT P-22 phosphor

Power consumption 120 Wh (with SDI: 130 Wh) Power requirements 100 to 240 V AC, 50/60Hz

Operating temperature

 $0 \text{ to } +35^{\circ}\text{C} (32 \text{ to } 95^{\circ}\text{F})$

Storage temperature -10 to +40°C (14 to 104°F) Operating humidity 35 to 85% (no condensation)

Storage humidity 0 to 90%

Dimensions (w/h/d) Approx. $450 \times 458 \times 503$ mm

 $(17^{3}/4 \times 18^{1}/8 \times 19^{7}/8 \text{ inches})$

not incl. projecting parts and controls

Mass Approx. 30.0 kg (66 lb 2 oz)

Accessory supplied AC power cord (1)

AC plug holder (1) Tally label (1)

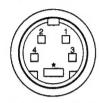
Cable with a 20-pin connector (1)

Design and specifications are subject to change

without notice.

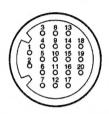
Pin assignment

Y/C IN connector (4-pin mini-DIN)



Pin No.	Signal	Description
1	Y-input	1 Vp-p, sync negative, 75 ohms
2	CHROMA subcarrier-input	300m Vp-p, burst Delay time between Y and C: within 0 ± 100 nsec., 75 ohms
3	GND for Y-input	GND
4	GND for CHROMA-input	GND

REMOTE connector (20-pin)



Pin No.	Signal	Wire color
1	Blue only	Brown
2	H/V DELAY	Red
3	MAIN/SUB*	Orange
4	EXT SYNC	Yellow
5	DEGAUSS	Green
6	R ch ON/OFF*	Blue
7	TALLY	Purple
8	LINE B	Grey
9	GND	White
10	GND	Black
11	GND	Pink
12	GND	Light Blue
13	LINE A	Spiral Orange
14	LINE/RGB	Spiral Yellow
15	GND	Spiral Green
16	L ch ON/OFF*	Spiral Blue
17	REMOTE	Spiral Purple
18	LINE C	Spiral Grey
19	UNDER SCAN	Spiral Pink
20	16:9	Spiral Light Blue

^{(*} For digital audio control)

How to connect a remote control unit Connect No.17 pin to one of the GND pins (No.9 – 12, and 15), then connect pins for the functions you want to use to other GND pins (No.9 – 12, and 15).

How to light the tally lamp Connect No.7 pin to one of the GND pins (No.9 - 12, and 15).

SAFETY CHECK-OUT

(US Model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

- Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
- Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
- Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
- Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
- Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
- Check the line cords for cracks and abrasion.
 Recommend the replacement of any such line cord to the customer.
- Check the B+ and HV to see if they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
- Check the metal trim, metallized knobs, screws, and all other exposed metal parts for AC leakage.
 Check leakage as described below.

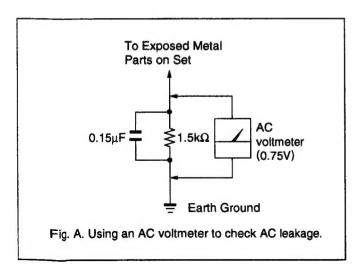
LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers). Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufactures' instructions to use these instruments.
- A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)



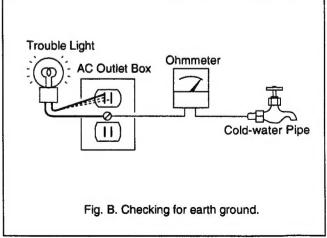


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(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK A ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RESQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MARQUE À SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ETLES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the

Operating Instruction Manual remain as in the manual.

Features

Picture

Horizontal resolution is more than 800 TV lines at the HR (High Resolution) Trinitron " picture tube HR Trinitron tube provides a high resolution picture. for PVM-14M4U/14M4E/20M4U/20M4E center of the picture.

Horizontal resolution is more than 600 TV lines at the Trinitron tube provides a high resolution picture. for PVM-14M2U/14M2E/20M2U/20M2E Trinitron¹⁾ picture tube center of the picture. When NTSC video signals are received, a comb filter activates to make more accurate Y/C separation. This contributes to less of a decrease in resolution, cross color and cross luminance phenomena.

The built-in beam current feedback circuit assures Beam current feedback circuit stable white balance.

The monitor can display NTSC, PAL, SECAM and

Four color system available

NTSC4432) signals. The appropriate color system is

selected automatically.

display is obtained with all three cathodes driven with

In the blue only mode, an apparent monochrome

Blue only mode

a blue signal. This facilitates color saturation and phase adjustments and observation of VCR noise.

Analog RGB or component (Y, R-Y and B-Y) signals from video equipment can be input through these Analog RGB/component input connectors Input

connectors.

and the luminance signal (Y), can be input through this The video signal, split into the chrominance signal (C) two signals, which tends to occur in a composite video connector, eliminating the interference between the signal, ensuring video quality. Y/C input connectors

When the EXT SYNC selector is in the on position, the monitor can be operated on the sync signal supplied from an external sync generator. External sync input

when no cable is connected to the loop-through output The input connector is terminated at 75 ohms inside connector, the 75-ohm termination is automatically released. connector. When a cable is connected to an output (connector with -\/\- mark only) Automatic termination

You can select the menu language from among five Five menu languages languages on the menu.

By using an MB-502B mounting bracket (for a 14-inch monitor, not supplied) or SLR-103A slide rail (for a 20-inch monitor, not supplied), the monitor can be EIA standard 19-inch rack mounting mounted in an EIA standard 19-inch rack.

By using the following optional SDI Kits, the monitor can display SMPTE 259M 4:2:2 serial digital signal For details on mounting, refer to the instruction manuals supplied with the mounting bracket kit or slide rail kit. SDI (Serial Digital Interface) Kit

from a digital VCR. (ex. Sony 4:2:2 VCR)

When the serial number of the BKM-101C you want to connect is less than 2,010,000, an optional connecting - BKM-101C: Component SDI Kit (for video) Component SDI Kit (for audio) harness (part no. 1-900-230-35) will be required. - BKM-102:

personal computers via the RS-422A serial interface. Interface Kit, the monitor can be controlled from By using the optional BKM-103 Serial Remote Serial Remote Interface Kit

The signal normally scanned outside of the screen can be monitored in the underscan mode. Underscan mode

RGB scanning lines may appear on the top edge of the When the monitor is in the underscan mode, the dark

screen. These are caused by an internal test signal, checked simultaneously in the H/V delay mode. The horizontal and vertical sync signals can be Horizontal/vertical delay mode rather than the input signal.

automatically when the power is turned on, or manually by pressing the DEGAUSS button. Degaussing of the screen can be performed Auto/manual degaussing

You can set color temperature, CHROMA SET UP. and other settings by using the on-screen menus. On-screen menus

 [&]quot;Trinitron" is a registered trademark of Sony Corporation.
 The NTSCAn system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43MHz. When an NTSC recorded video program is played back with a Trident (PAL/SECAM/NTSCA.) VTR, the NTSCA. signal is

Location and Function of Parts and Controls

Figure

9 e @ 0 Ð

monitor is selected, indicating that the picture is being Lights up when the video camera connected to this Tally lamp

For details on how to light the tally lamp, see page 19.

Depress to turn on the monitor. The indicator will light POWER switch and indicator

Lights up when you select ON on the USER PRESET B REMOTE indicator

cable to the REMOTE connector. The controls on the front panel do not work when this indicator lights up. menu (see page 13), or when you connect a supplied For details on how to connect the cable, see page 19.

O VOLUME control

Furn this control clockwise or counterclockwise to obtain the desired volume.

© CONTRAST control

Turn this control clockwise to make the contrast higher or counterclockwise to make it lower.

@ PHASE control

NTSCAA color systems. Turn it clockwise to make the skin tones greenish or counterclockwise to make them This control is effective only for the NTSC and purplish.

CHROMA control

Furn this control clockwise to increase the color intensity or counterclockwise to decrease it.

"chroma" and "phase" adjustments and observation

of VCR noise.

monochrome picture on the screen. This facilitates

Only blue signal is displayed as an apparent

 As the BLUE ONLY selector, press this selector (light on) to eliminate the red and green signals. ("Phase" adjustment is effective only for the NTSC

settings by pressing this button when a menu is on

As the RESET button, you can reset the menu

BRIGHT (brightness) control

furn this control clockwise to increase the brightness or counterclockwise to decrease it.

APERTURE control

Turn this control clockwise to increase sharpness or counterclockwise to decrease sharpness.

EXT SYNC (external sync) selector

Set this selector to the off position (light off) to operate the monitor on the sync signal from the displayed video signal

The PHASE (10), CHROMA (10) and APERTURE

(a) controls have no effect on the pictures of RGB

Set this selector to the on position (light on) to operate the monitor on an external sync signal through the EXT SYNC connector.

LINE/RGB input selector

When a menu is on the display, you can return to the previous menu by pressing this button.

ress this button to display the main menu.

MENU (EXIT) button

signals.

Press the button to confirm a selected item on the

● ENTER (SELECT) button

Press this selector to select the input to be monitored. monitor the signal through the LINE A, LINE B or Set this selector to the off position (light off) to LINE C connectors.

monitor the signal through the RGB/COMPONENT Set this selector to the on position (light on) to

C/SDI selector

LINE position (light off), press this selector (light When the LINE/RGB input selector is set to the on) to monitor the signal through the LINE C

RGB position (light on), press this selector (light on) to monitor the SDI signal (optional kits are required). When the LINE/RGB input selector is set to the

B/COMPONENT selector

Press this selector (light on) to observe the horizontal

H/V DELAY selector

6:9 picture.

The horizontal sync signal is displayed in the left

and vertical sync signals at the same time.

quarter of the screen; the vertical sync signal is

displayed near the center of the screen.

Press this selector (light on) to monitor the signals of

16:9 selector

Press the buttons to move the cursor (>) or adjust

(+)/ ← (-) puttons selected item on the menu. When the LINE/RGB input selector is set to the LINE position (light off), press this selector (light on) to monitor the signal through the LINE B connectors.

RGB position (light on), press this selector (light on) to monitor the component signal through the RGB/ · When the LINE/RGB input selector is set to the COMPONENT connectors.

The display size is reduced by approximately 5% so

that four corners of the raster are visible.

® BLUE ONLY selector

RESET button

Press this selector (light on) for underscanning.

© UNDER SCAN selector

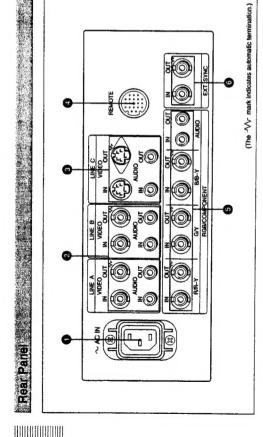
A/RGB selector

LINE position (light off), press this selector (light · When the LINE/RGB input selector is set to the on) to monitor the signal through the LINE A connectors.

RGB position (light on), press this selector (light on) to monitor the RGB signal through the RGB/ When the LINE/RGB input selector is set to the COMPONENT connectors.

demagnetized. Wait for 10 minutes or more before Press this button momentarily. The screen will be DEGAUSS button ising this button again.

Location and Function of Parts and Controls



Connect the supplied AC power cord to this socket and AC IN socket to a wall outlet.

I'wo groups (A and B) of line input connectors for the composite video and audio signals and their loop-**Ø LINE A, LINE B connectors**

off) and press the A/RGB or B/COMPONENT selector set the LINE/RGB selector to the LINE position (light To monitor the input signal through these connectors, through output connectors. (light on).

VIDEO IN (BNC)

Connect to the video output of video equipment, such For a loop-through connection, connect to the video as a VCR or a color video camera. output of another monitor.

Connect to the video input of a VCR or another

When the cable is connected to this connector, the 75-ohm termination of the input is automatically released, and the signal input to the VIDEO IN

AUDIO IN (phono jack)

For a loop-through connection, connect to the audio microphone via a suitable microphone amplifier. Connect to the audio output of a VCR or to a output of another monitor.

When the EXT SYNC selector is set to the off position

R/R-Y IN, G/Y IN, B/B-Y IN (BNC)

selector (light on).

(light off), the monitor operates on the sync signal

from the G/Y channel.

Loop-through output of the AUDIO IN connector. AUDIO OUT (phono jack)

Connect to the analog RGB signal outputs of a video

camera, etc.

To monitor the RGB signal

Connect to the audio input of a VCR or another nonitor.

Connect to the Y/C separate output of a video camera, VCR or other video equipment. For a loop-through connection, connect to the Y/C Y/C IN (4-pin mini-DIN) LINE C connectors

separate output of a VCR or another monitor.

Connect to the Y/C separate input of a VCR or another Loop-through output of the Y/C IN connector. Y/C OUT (4-pin mini-DIN)

When the cables are connected to these connectors, the

released, and the signal inputs to the R/R-Y IN, G/Y

IN, B/B-Y IN connectors are output from these

75-ohm termination of the inputs is automatically

Loop-through outputs of the R/R-Y IN, G/Y IN, B/B-

Y IN connectors.

R/R-Y OUT, G/Y OUT, B/B-Y OUT (BNC)

Connect to the R-Y/Y/B-Y component signal outputs

To monitor the component signal

of a Sony Betacam video camera, etc.

ohm termination of the input is automatically released, When the cable is connected to this connector, the 75and the signal input to the Y/C IN connector is output from this connector.

Connect to the audio output of a VCR or a microphone AUDIO IN (phono jack)

(via a suitable microphone amplifier).

AUDIO OUT (phono jack)

Connect to the audio output of video equipment when a Betacam video recorder, etc. AUDIO IN (phono jack) Loop-through output of the AUDIO IN connector

Loop-through outputs of the AUDIO IN connector. AUDIO OUT (phono jack)

sync signal through this connector.

this connector.

Loop-through output of the IN connector. Connect to the external sync input of video equipment to be synchronized with this monitor.

this connector.

Connect to the R-Y/Y/B-Y component signal inputs of To output the component signal

the analog RGB or component signal is input.

Press the EXT SYNC selector (light on) to use the **©** EXT SYNC (external sync) connectors

front panel will be turned on and off by the connected

equipment. This connector can also be used for

connecting a remote control unit.

For details on the pin assignment of this connector, see

page 19.

special-effect generator, etc. The tally lamp on the

Connect to the tally output of a control console,

■ REMOTE connector (20-pin)

Connect to the audio input of a VCR or another

monitor.

When this monitor operates on an external sync signal, connect the reference signal from a sync generator to

RGB signal or component signal input connectors and

their loop-through output connectors.

B RGB/COMPONENT connectors

set the LINE/RGB selector to the RGB position (light on), and press the A/RGB or B/COMPONENT To monitor the input signal through these connectors,

When the cable is connected to this connector, the 75ohm termination of the input is automatically released, and the signal input to the IN connector is output from

> Loop-through output of the VIDEO IN connector. VIDEO OUT (BNC)

connector is output from this connector.

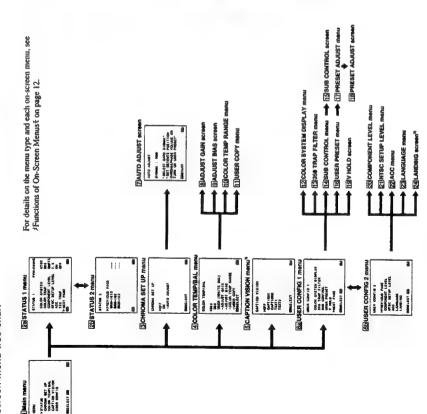
Connect to the analog RGB signal inputs of a video To output the RGB signal printer or another monitor.

Jsing On-Screen Menus

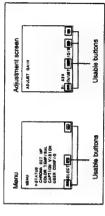
You can make various settings and adjustments of the monitor using the on-screen menus.

On Sgreen Menu Configuration

On-screen menu tree-chart



adjustment screens are displayed at the bottom of the screen. You can perform menu operation using the The buttons that can be used on the menus and displayed buttons. Operation through On-Screen Menus



MENU/EXIT
 button

@ 1/+ button

2 38 5

o **g** [2]

There are five menu operation buttons on the front

panel of the monitor.

Menu operation buttons

Display of the usable menu operation buttons

Operating procedures

To display the menu, follow this procedure.

© ENTER/ SELECT button

⊕ 4/- button

RESET button

િ≱ર્ફ્સ

Press the MENU/EXIT (①) button. MENU ([1]: main menu) appears.

The following table shows how these five buttons function when using the menus.

Button To adjust them tem

return to the previous menu return to the previous menu select an adjustment item

decide a selected item

6 ENTER MENU

0

2 Move the cursor (*) to the desired setting menu by

pressing the \$\rightarrow{+}\- or \$\rightarrow{+}\+ (\overline{\ov

3 Press the ENTER/SELECT (@) button.

The setting menu selected in step 2 appears. 4 Move the cursor (▶) to the desired item by pressing the ♦/- or †/+ (♠, ♠) button.

5 Press the ENTER/SELECT (
 button.

The adjustment screen or setting menu selected in step 4 appears.

reset current settings to the factory setting

® RESET 9

move the cursor (>) downwards move the cursor (*) upwards

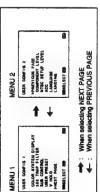
decrease selected value

For detailed information of menus, see Functions of On-Screen Menus? on page 12.

^{5]} CAPTION VISION menu is provided with PVM-14M4U/14M2U/20M4U/20M2U only.
23] LANDING screen is provided with PVM-20M4U/20M4E only.

Using On-Screen Menus

To display the next (or previous) page of the Select NEXT PAGE on the menu to display the next page and PREVIOUS PAGE on the menu to display the previous page.



How to display the next or the previous page

screen on this menu by using the 1/+, 1/- and

ENTER/SELECT buttons.

You can select an item or enter an adjustment

Setting menu

You can confirm the current settings.

Status menu

setting menu. Main menu

> Each time you press the MENU/EXIT (button, the To close the menu (to return to the regular displayed. Press the MENU/EXIT (1) button on-screen menu returns to the one previously screen)

For PVM-14M4E/14M2E/20M4E/20M2E: For the first time when the monitor is turned on, the LANGUAGE menu (23) will appear on the screen. So, select the language you want to use.

2a STATUS 1 menu Shows the current settings.



1 Move the cursor (V) to the desired language by pressing the 4/- or 4/+ (4, 6) button.

Press the MENU/EXIT () button.

N



the procedure above, the LANGUAGE menu will Unless you press the MENU/EXIT (11) button in always appear whenever you turn on the monitor.

Functions of On-Screen Menus

Select an item to adjust on the menus and screens (12)

through [19]). To go to the USER CONFIG 2 menu,

select NEXT PAGE.

There are four types of on-screen menus.

(6b) USER CONFIG 2 menu Select an item to adjust on the menus and screens (20) through [24]). To go to the USER CONFIG I menu select PREVIOUS PAGE. You can enter another menu such as status menu or

press ENTER/SELECT to start automatic "chroma" [7]AUTO ADJUST screen Select the color bar signal (full, SMPTE, EIA) and To activate these adjustments, select ON on the CHROMA SET UP menu (3). and "phase" (NTSC signal only) adjustments.

BADJUST GAIN screen Adjust GAIN in USER mode. 9 ADJUST BIAS screen

Adjust BIAS in USER mode.

([] indicates the factory setting.)

adjustments you made remain unchanged until next change even if you turn off the power.

Adjustment screen You can make adjustments on this screen. The

Select another menu and press ENTER/SELECT to go

1 Main menu

to the menu.

[5000K-10000K] Select the color temperature range in USER mode. 10 COLOR TEMP RANGE menu

Store the factory setting of D65 or D93 as the value for **11 USER COPY menu** USER mode.

the color system type being used appears on the screen Select the color system type. When AUTO is selected, [AUTO] 12 COLOR SYSTEM DISPLAY menu each time you change the signal input.

[OFF] Color spill or color noise may be eliminated if you 13358 TRAP FILTER menu select ON (NTSC signal only). Normally select OFF.

"phase" (NTSC signal only) adjustments done on the AUTO ADJUST screen ([7]).

③CHROMA SET UP menu Select ON on this menu to activate "chroma" and

[2b] STATUS 2 menu Shows what optional kit is installed in the monitor.

4]COLOR TEMP/BAL menu Select the color temperature from among D65, D93 and USER. USER is set to D65 as the factory setting.

You can adjust or change the color temperature in USER mode (a measuring instrument is required).

Select an item (CONTRAST, BRIGHT, CHROMA and PHASE controls on the front panel) to finely adjust on the SUB CONTROL screen ([15]) 14SUB CONTROL menu

[D65]

[5]CAPTION VISION menu This menu is provided only for PVM-14M4U/14M2U/

Vision. To display it, select the caption type in this

The monitor can display the signal with Caption

20M4U/20M2U.

Finely adjust the selected item on the SUB CONTROL CHROMA and PHASE control) has a click position at the center of its adjustment range. You can adjust the menu (14). Each control (CONTRAST, BRIGHT, setting of the click position with this feature. **ISSUB CONTROL screen**

If you select ON on this menu, the REMOTE indicator lights up and the controls on the front panel do not work. The monitor operates with the user preset 16 USER PRESET menu settings.

CONTRAST, VOLUME, and APERTURE controls to a desired level and can use these settings by selecting To adjust the user preset settings, select the PRESET ADJUST menu (17). You can preset the BRIGHT, CHROMA, PHASE, TPRESET ADJUST menu

PHASE, CONTRAST, VOLUME, and APERTURE Adjust the selected item (BRIGHT, CHROMA, control) on the PRESET ADJUST menu ([17]) 18PRESET ADJUST screen

ON on the USER PRESET menu ([16])

When you cannot read the display, select the input that Adjust the vertical hold if the picture rolls vertically. 19V HOLD screen is not connected.

Select the component level from among three modes. For PVM-14M4U/14M2U/20M4U/20M2U for 100/7.5/75/7.5 signal N10/SMPTE for 100/0/100/0 signal for 100/0/75/0 signal 20 COMPONENT LEVEL menu BETA 7.5 BETA 0

BETA 7.5] [N10/SMPTE] For PVM-14M4E/14M2E/20M4E/20M2E

2

repeatedly until the regular screen appears.

Using On-Screen Menus

For PVM-14M4E/14M2E/20M4E/20M2E

21 NTSC SETUP LEVEL menu

[7.5] [0] The 7.5 setup level is mainly used in north America. Select the NTSC setup level from two modes. For PVM-14M4U/14M2U/20M4U/20M2U The 0 setup level is mainly used in Europe.

置ACC menu Set ACC (Auto Color Control) circuit on or off. When the fine adjustment is necessary, select OFF on the ACC menu.

Normally select ON.

[NO]

languages (English, German, French, Italian, Spanish). You can select the menu language from among five 23LANGUAGE menu

[ENGLISH]

24LANDING screen

DEGAUSS button, you can adjust the landing so as to This menu is provided only for PVM-20M4U/20M4E. The following two methods are available to adjust the if the color is not uniform even after you press the obtain color uniformity on this screen.

landing.

When the signals of the horizontal lines are input and displayed:

When the signals of the white color are input and displayed on the screen an horizontally as possible. Press the \$\int\-\- or \$\frac{1}{4}\- button until the lines are

Press the \$\int \- or \$\frac{1}{2} + button until the white color on the screen become as uniform as possible. displayed:

To reset the setting to standard (00), press the RESET button.

Connections

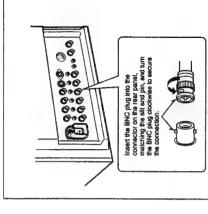
How to Connect the AC Power Cord

Connect the AC power cord (supplied) to the AC IN socket and to a wall outlet.

Pull out the AC plug holder while pressing the lock levers. To remove the AC power cord

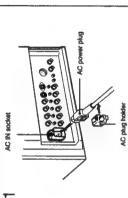
Connect a coaxial cable with the BNC plugs to the BNC connectors on the rear panel as illustrated below.

How to Connect a Cable to a BNC Connector



To connect an AC power cord securely with an AC plug holder

to AC IN



Plug the power cord into the AC IN socket. Then, attach the AC plug holder (supplied) on top of the AC power

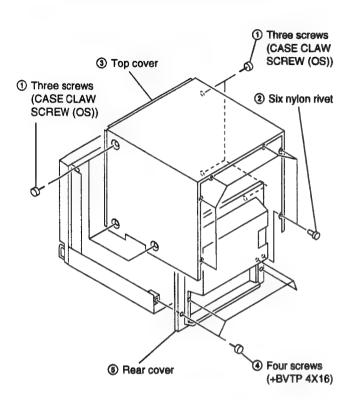
S

Slide the AC plug holder over the cord until it locks.

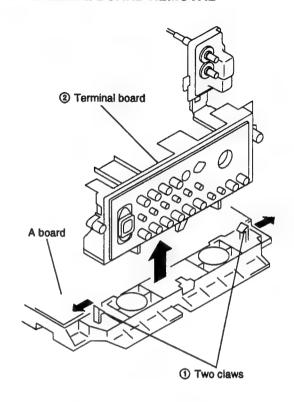
7

SECTION 2 DISASSEMBLY

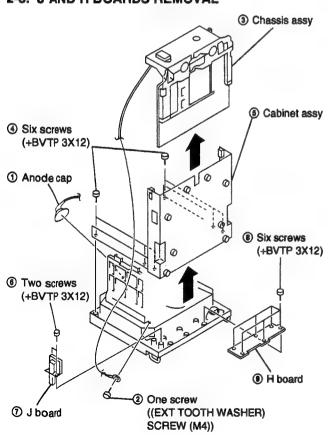
2-1. TOP COVER AND REAR COVER REMOVAL



2-2. TERMINAL BOARD REMOVAL

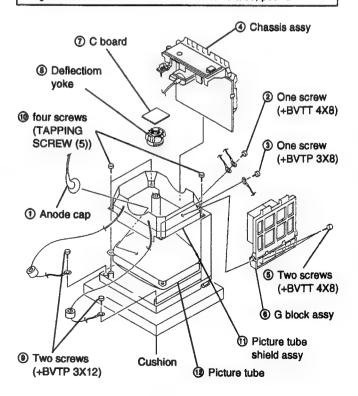


2-3. J AND H BOARDS REMOVAL

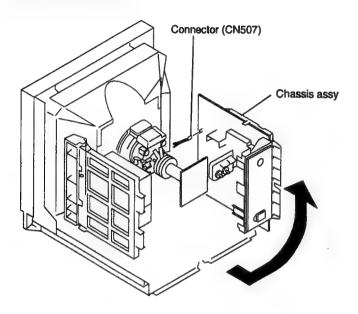


2-4. PICTURE TUBE REMOVAL

When exchange the Picture tube of PVM-14M4 series and if the magnet had stuck on the neck of the Picture tube, peel it.

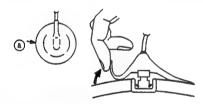


2-5. SERVICE POSITION

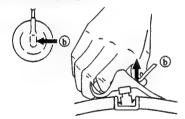


• REMOVAL OF ANODE-CAP

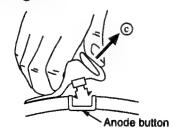
NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.



• REMOVING PROCEDURES



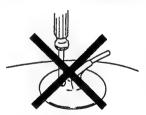
① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow **(b)**.
- When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow @.

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anodecaps! A material fitting called as shatter-hook terminal is built in the rubber.
- 3 Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.





SECTION 3 SET-UP ADJUSTMENTS

3-1. PREPARATIONS (1)

Service Mode

This set is provided with a switch for service on the front panel that can be used to make various adjustments. The operation method of this switch is explained in detail below.

1. Entering the service mode

Simultaneously press the [ENTER] key and the [DEGAUSS] key shown on the display of the menu.

2. Service mode display

(1)	(5)	(4)	(3)	(6)
(2)				

Range of Service Mode Display

- The service items are largely classified into 16 types displayed by titles.
- (2) The names of the service items or READ/WRITE guidance, etc., are displayed. The names are displayed to the left and the guidance to the right.
- (3) This is the serial number for each of the service items. 1-120.
- (4) This is the adjustment data for the service items that are now stored in the RAM. Adjustments can be made by changing these values, but as long as nothing is written to the ROM the adjustment values will be erased by turning off the power or by reading, so please be careful.
- (5) When the adjustment data that is now displayed is identical with the data in the ROM, the cursor (►) is displayed.
- (6) The present status is displayed.
 - [*]: Writing to the ROM. Make sure not to turn off the power while this display is on.
 - [?]: ROM reading error. In this case, an image is output with the standard adjustment data that the microcomputer itself possesses. [¿]: Problem in the I2C bus.

3. Finishing the service mode

Simultaneously press the [ENTER] key and the [DEGAUSS] key shown on the display of the menu.

4. Easy ON/OFF of the service mode

If once entering the service mode after having turned on the power, easy ON/OFF is possible by once more pressing the A, B or C switch on the front panel (the LED lights) as long as the power is not turned off or as long as the service mode is not finished.

5. Change of position of the service mode display

If the switch is continuously pressed when turning on in the above easy mode, the display position moves in the V direction. This method is used when the display is outside of the effective screen area.

6. Change of service items

The items are returned with the [MENU] key and forwarded with the [ENTER] key. When a key is continuously pressed, the operation will be repeated.

7. Change of service data

The service data is made larger with the [†] key and smaller with the [‡] key. When continuously pressing the keys, the operation will be repeated.

8. Reading of service data

When reading data from the ROM to the RAM, press the [B/O] key once and check than the READ display is shown in the guidance, and then press the [B/O] key once again. The adjustment data that is written will return to its previous state, so please be careful.

9. Writing of service data

When writing data from the RAM to the ROM, press the [DE-GAUSS] key once and check that the WRITE display shown in the guidance, and then press the [DEGAUSS] key once again. Not only the displayed data will be written, but all data, so please be careful.

10. Carrying out FACTORY RESETTING

In case the adjustment data has been destroyed for some reason, and you keep pressing the [B/O] key at the beginning of the above reading, the READ guidance will change to FACTORY RESET guidance in approximately 3 seconds so that the factory resetting can be carried out. By once again pressing the [B/O] key after this, resetting will be carried out ([*] will be displayed as status) and factory resetting will be executed. However, in case the data available at the time of shipment from the factory has been destroyed, or if the ROM has been replaced, etc., or if factory setting mentioned later on has been carried out, factory resetting is executed.

11. Carrying out FACTORY SETTING

Make sure to make possible the above factory resetting by making a copy of the adjustment data when replacing the ROM. If you keep pressing the [DEGAUSS] key at the beginning of the above writing, the WRITE guidance will change into FACTORY RESET guidance after approximately 3 seconds. By once again pressing the [DEGAUSS] key after this, setting will be carried out ([*] will be displayed as status) and the data will be copied. By carrying out this operation, the selection items of the menu and the adjustment values will be reset to the standard conditions, so please be careful. If this operation is carried out once, it cannot be carried out again, but the FACTORY SET FLAG (No. 120) in the service mode can be set to 1.

Table 3-1 Table map (1)

** Signify (The setting is vary with the destination.)
Refer to the "Table 3-1 Table map (2)."

No.	SERVICE ITEM		MAX	STD	No.	SERVICE ITEM	<u> </u>	MAX	STD
1	NOR 50 DEF	H FREQUENCY	255	85	61	C/T1 D??	BIAS <red></red>	1023	376
2		VIDEO PHASE	255	139	62		BIAS <green></green>	1023	512
3		V SIZE	255	139	63		BIAS <blue></blue>	1023	396
4	NOR 60 DEF	H FREQUENCY	255	96	64		GAIN <red></red>	1023	660
5		VIDEO PHASE	255	115	65		GAIN < GREEN>	1023	620
6		V SIZE	255	137	66		GAIN <blue></blue>	1023	602
7	NORDEF	V CENTER	255	103	67		B/O <red></red>	255	115
8		H SIZE	255	108	68		B/O <green></green>	255	115
9		PIN PHASE	255	128	69	C/T2 D??	3200K SW	1	0
10		PIN AMP	255	128	70		BIAS <red></red>	1023	256
11		LOWER PIN AMP	255	128	71		BIAS <green></green>	1023	512
12		UPPER PIN AMP	255	128	72		BIAS <blue></blue>	1023	512
13		SEXY	255	128	73		GAIN <red></red>	1023	602
14		V LINEARITY	255	120	74		GAIN <green></green>	1023	700
15		VBOW	හ	32	75		GAIN <blue></blue>	1023	672
16		LOWER BOW	63	32	76		B/O <red></red>	255	95
17		V ANGLE	63	322	77		B/O <green></green>	255	108
18	U/S DEF	V SIZE <50>	255	100	78	W/B	SUBCON <4 :3,NORMAL>	255	178
19		V SIZE <60>	255	100	79		SUB CON <4:3,HN DELAY>	255	97
20		H SIZE	255	118	80		SUB CON <16 : 9,NORMAL>	255	150
21		PIN PHASE	255	128	81		SUB CON <16 :9,H/V DELAY>	255	78
22		PIN AMP	255	100	82		SUB BRIGHT	255	69
23	16:9 NOR DEF	V SIZE <50>	255	72	83		USER B/O <red></red>	255	115
24		V SIZE <60>	255	60	84		USER B/O <green></green>	255	115
25		PIN PHASE	255	135	85	OTHER	LANDING	255	64
26		PIN AMP	255	90	86		V HOLD	255	128
27	16:9 U/S DEF	V SIZE <50>	255	61	87		H BLANKING	255	73
28		V SIZE <60>	255	39	88		V BLANKING <50>	255	82
29		PIN PHASE	255	135	89		16:9 BLANKING START <50>	255	32
30		PIN AMP	255	65	90		16:9 BLANKING END <50>	255	176
31	COMPONENT	SUB PHASE	255	130	91		V BLANKING <60>	255	161
32		SUB CHROMA < NORMAL>	255	182	92		16:9 BLANKING START <50>	255	42
33		SUB CHROMA <smpte></smpte>	255	170	93		16:9 BLANKING END <50>	255	226
34	1,500	R-Y LEVEL	255	163	94		H DELAY	255	142
35	NTSC	BURST GATE PULSE WIDTH	255	52	95		V DELAY	255	104
36		CRYSTAL	255	59	96		HP POSITION	255	145
37		PHASE <normal></normal>	255	80	97		HP WIDTH <normal></normal>	255	148
38		PHASE <acc off=""></acc>	255	96	98	0.10	HP WIDTH <h delay="" v=""></h>	255	62
39		B-Y PHASE	255	162	99	SYSTEM	SDI AUDIO	7	5
40		CHROMA <normal></normal>	255	98	100		358 TRAP FILTER	1	0
41		CHROMA <acc off=""></acc>	255	27	101		ACC	1	0
43	NTSC 443	CRYSTAL	255 255	98 82	102		CAPTION VISION	7	0
44	11100 770	PHASE < NORMAL>	255	62			COMPONENT LEVEL	3	*
45		PHASE <acc off=""></acc>	255	64	104		NTSC SETUP LEVEL	1	*
46		B-Y PHASE	255	181	105		CHROMA SET UP COLOR SYSTEM DISPLAY	1	0
47		CHROMA <normal></normal>	255	104	107		COLOR SYSTEM DISPLAY	3	0
48		CHROMA <acc off=""></acc>	255	36	108		USER PRESET	3	
49		R-Y LEVEL	255	100	109		LANGUAGE	7	0
50	PAL	PHASE <normal></normal>	255	110	110		RGB SYNC	1	0
51		PHASE <acc off=""></acc>	255	105	111		OPTION BOARD	7	0
52		B-Y PHASE	255	122	112	-	AGING MODE	1	0
53		CHROMA <normal></normal>	255	109	113		PAL-M	1	0
54		CHROMA <acc off=""></acc>	255	41	114		MODEL	31	*
55		R-Y LEVEL	255	121	115		COLOR TEMP DISP 1	127	*
56	SECAM	CHRÓMA	255	93	116		COLOR TEMP DISP 2	127	*
57		R-Y LEVEL	255	181	117		REMOTE ADDRESS	63	0
58		COLOR BALANCE <r-y></r-y>	255	118	118		RESERVED 1	1	-
59		COLOR BALANCE <b-y></b-y>	225	135	119		RESERVED 2	2	+
60	C/T1 D??	3200K SW	1	0	120		FACTORY SET FLAG	1	0

Table 3-1 Table map (2)

Model Name	Component level	NTSC Set-up level	Model	Color temp disp 1	Color temp disp 2
PVM-20M4U	1	1	0	65	93
PVM-20M2U	1	1	1	65	93
PVM-20M4J	2	0	2	93	65
PVM-20M4E	2	0	3	65	93
PVM-20M2E	2	0	4	65	93
PVM-14M4U	1	1	5	65	93
PVM-14M2U	1	1	6	65	93
PVM-14M4J	2	0	7	93	65
PVM-14M1J	2	0	8	93	65
PVM-14M4E	2	0	9	65	93
PVM-14M2E	22	0	10	65	93
PVM-20M4A	2	0	11	65	93
PVM-14M4A	2	0	12	65	93
PVM-14M2A	2	0	13	65	93
PVM-14M4B	1	1	14	65	93
BVM-14M4DJ	2	0	15	93	65
BVM-14M4DE	2	0	16	65	93
PVM-20M4T	2	0	17	93	65
PVM-14M4T	1	0	18	93	65

3-2. Preparation (2). Initialization

 Supply composite video or component signals as shown in Table 3-2.

Table 3-2

Signal		Details of signal	Standard level P-W
Composite video	358NT)	100% white	0.714V
VIGEO	443NT \	75% white	0.536V
	PALM	100% white	0.7V
	SECAM	75% white	0.525V
		100% white Y	0.7V
	BETA0	75% white Y	0.525V
		75%color B-Y, R-Y	
Component		(P-P for this item only)	0.7V
·		100% white Y	0.7V
	SMPTE	75% white Y	0.525V
		75%color B-Y, R-Y	0.525V
		(P-P for this item only)	
Voice	sound	-5dBs	0.436Vrms

^{*} Refer to Table 3-3 for groups of models.

Table 3-3

Group of models	Models				
1	PVM-14M4U PVM-14M4A	PVM-14M4J	PVM-14M4E		
2	PVM-14M2U	PVM-14M2E	PVM-14M2A		
3	PVM-14M1J				
4	PVM-20M4U PVM-20M4A	PVM-20M4J	PVM-20M4E		
5	PVM-20M2U	PVM-20M2E			

^{*} In this chapter, indicates the control items in the service mode.

Example: 60 H-FREQ

3-3. Writing model data

 Write model data on respective models in the service mode at the location of No.114 MODEL in accordance with Table 3-4.

Table 3-4

Model	Model data
PVM-20M4U	0
PVM-20M2U	1
PVM-20M4J	2
PVM-20M4E	3
PVM-20M2E	4
PVM-14M4U	5
PVM-14M2U	6
PVM-14M4J	7
PVM-14M1J	8
PVM-14M4E	9
PVM-14M2E	10
PVM-20M4A	11
PVM-14M4A	12
PVM-14M2A	13

Write the following data in the service mode at the location of No.115 COLOR TEMP DISP 1.

COLOR TEMP DISP 1

U/C, AEP <u>65</u> J <u>93</u>

Write the following data in the service mode at the location of No.116 COLOR TEMP DISP 2.

COLOR TEMP DISP 2

U/C, AEP <u>93</u> J <u>65</u>

* Standard inspection state

Unless otherwise specified in this manual, make adjustment under the following conditions:

APERTURE MIN (Turn FLAT fully counterclockwise.) BRIGHT 50% (Center click) **CHROMA** 50% (Center click) **PHASE** 50% (Center click) CONTRAST 80% (Center click) **VOLUME** 50%

^{*} Before turning off the power after adjustment in the service mode, write the adjustment data. When the power is turned off before writing, adjusted data will all be lost.

3-4. Picture output

1. AC input voltage setting

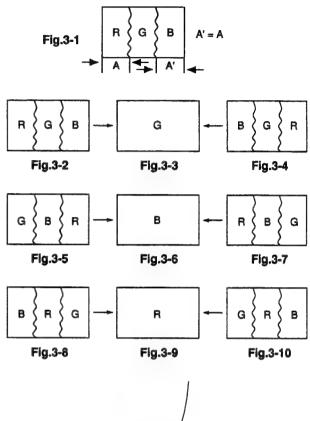
- Input VIDEO signals and AUDIO signals to respective terminals on the connector panel.
- 2. Set the sliduck AC voltage as shown in Table 3-5.

Table 3-5

Group o	Voltage	
PVM-14M4J(J) PVM-14M1J(J)	PVM-20M4J(J)	AC 100±3V (Distortion factor:3% max.)
PVM-14M4U(U/C) PVM-20M2U(U/C)	PVM-14M2U(U/C) PVM-20M4U(U/C)	AC 120±3V (Same as above)
PVM-14M4E(AEP) PVM-14M2A(AUS) PVM-20M4E(AEP) PVM-20M4A(AUS)	PVM-14M2E(AEP) PVM-14M4A(AUS) PVM-20M2E(AEP)	AC 220±3V (Same as above)

3-5. Landing adjustment

- 1. CONT ... MAX BRT ... Conspicuous position
- 2. Roughly adjust the white balance, G2, and convergence.
- Switch the rotary SW of the single color switch to change the color into green only.
- Adjust the purity knob so that the green will come to the center of the screen. Make R and B almost identical. (Fig. 3-1)
- Switch to B only, R only, and G only and verify each. (Figs.3-1, 3-2, and 3-3)
- Bring the deflection yoke gradually forward and adjust the deflection yoke so that R and B on both sides of the screen will be green. (Fig. 3-2 → Fig. 3-3)
- If the deflection yoke comes forward too much, the pattern shown in Fig.3-4 will appear. If so, move the deflection yoke backward. (Fig.3-4 → Fig.3-3)
- Switch the single color switch to B and verify the single color. (Fig. 3-6)
- Switch the single color switch to R and verify the single color. (Fig.3-9)
- 10. When two colors are mixed, set the mixed color as the standard, and repeat operations 6 and 7.
- 11. Switch to an all-white signal and check the uniformity.
- 12. When the deflection yoke position is determined, fasten it with the fixture.



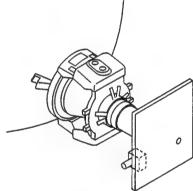
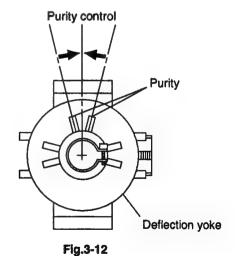


Fig.3-11



Note: Attach NTC magnets for 20M4 to the locations shown in Fig.3-13.

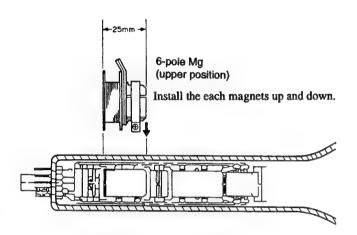


Fig. 3-13

3-6. Convergence adjustment (1)

- Input a dot pattern signal. CONT ... Conspicuous position BRT ... MIN
- Align the horizontal R, G, and B dots at the center of the screen with the H-START VR.
- When H-CENT is changed after H-STAT adjustment, readjust H-STAT. (H-STAT will change by means of H-CENT VR.)
- 3. Align the vertical location of R, G, and B in the center of the screen with the V-STAT Mg. (Fig. 3-14, 3-15)
- * After V-STAT adjustment, paint-lock the knob.

V-STAT Mg knob

While keeping the angles A and B equal (I = I), align the vertical convergence.

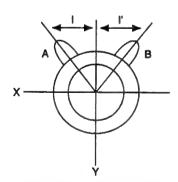


Fig. 3-14 Good example

If the A and B knobs are not symmetrical ($I \neq I'$), the focus may deteriorate, beam striking or other adverse effects may occur.

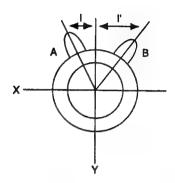


Fig. 3-15 Bad example

4. For HMC, use the BMC Mg to adjust the R and B dots so that they will be symmetrical horizontally with respect to the G dot.

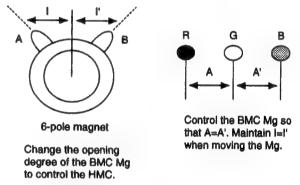


Fig. 3-16

For VMC, use the MBC Mg to adjust the R and B dots so that they will be symmetrical vertically with respect to the G dot.

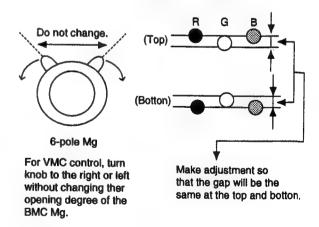


Fig. 3-17

6. Repeat adjustments 2. to 5.

- * The above adjustment may affect the landing, so after adjustment, check the landing again.
- 7. Paint-lock the knobs after adjustment.

3-7. Deflection yoke neck rotation adjustment

- If there is nonconvergence on both sides of the X or Y axis of the screen, turn the neck of the deflection yoke in the direction of the arrow to hold the nonconvergence for the entire CRT screen within the tolerance.
- * Applicable only to groups of models 1, 2, 3, and 5.
- (1) Reverse cross (2) Regular cross misconvergence misconvergence pattern pattern Move the deflection yoke Move the deflection yoke downward. upward. BGR RGB RGB GR GR GB 0 <000 RGB BGR

Fig. 3-18

Move the defication

(3) Pattern of left-sided deflection yoke

- Fig. 3-19
- (4) Pattern of right-sided deflection yoke

Move the deflection

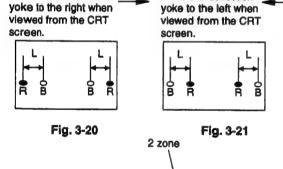


Fig. 3-23

1 zone

- 2. Turn the neck of the deflection yoke to align the V pin vertically.
- Applicable only to group of models 4.

3. Insert the wedge between the deflection yoke and CRT funnel to lock the deflection yoke. (Fig. 3-24)



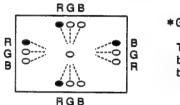
Groups of models 1,2,3,and 5 have been treated.



Group of models 4 have been treated.

Fig. 3-24

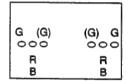
4. The following patterns cannot be corrected by turning the neck. (Figs.3-25, 3-26, and 3-27)



*Gun rotatuon

The X-axis and Y-axis beams are distorted on both sides.

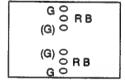
Fig. 3-25



*HCR Large(Small)

The horizontal portion of the G raster is wider(narrower) than that of the RB raster on both sides of the screen.

Fig. 3-26



*VCR Large(Small)

The vertical portion of the G raster is wider(narrower) than that of the RB raster on both sides of the screen.

Fig. 3-27

3-8. Convergence adjustment (2)

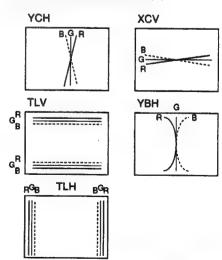


Fig. 3-28 Convergence compensation VR,coil,and compensator

Note: When adjustment is insufficient, use permalloy for perfect adjustment.

1. Group of models 4 (See Table 3-3.)

- 1. Input a cross-hatch signal.
- Make adjustment with the TLV, YCH, YBH VR, and XCV coils of the deflection yoke to minimize nonconvergence.
- When the nonconvergence of the TILT component is included in the horizontal convergence, make adjustment with the TLH compensator. (Fig.3-28)

2. Groups of models 1, 2, and 3 (See Table 3-3.)

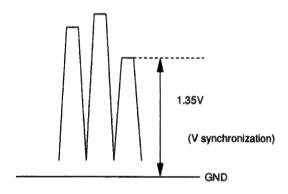
- 1. Input a cross-hatch signal.
- Make adjustment with the TLV, YCH VR, and XCV coils of the deflection yoke to minimize nonconvergence.
- 3. When the nonconvergence of the TILT component is included in the horizontal convergence, insert the TLH compensator into the deflection yoke for adjustment. (Fig. 3-28)

3. Group of models 5 (See Table 3-3.)

- 1. Input a cross-hatch signal.
- Make adjustment with the XCV coil of the deflection yoke to minimize nonconvergence.
- When the nonconvergence of the TILT component is included in the vertical convergence, insert the TLV compensator into the deflection yoke for adjustment. (Fig.3-28)

3-9. G2 adjustment

- 1. Input a 525 monoscope signal.
- 2. Connect the probe of the oscilloscope to TP403 on the A board.
- 3. Measure the lowest reference pulse of the three.
- Make adjustment with SCREEN VR so that the left end of the waveform will be 1.35 V±0.05 V.



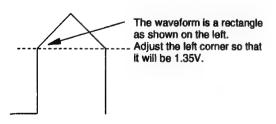


Fig. 3-29

3-10. White balance adjustment

- Input a 525 monoscope signal. (Input from LINE A or B with no burst.)
- 2. Set as follows:

CONT: 0%

BRT: 50%

 Adjust <u>SUB-BRIGHT</u> in the service mode so that the 20-tone gray scale will be as follows:

0 and 5 IRE → Cut off

10 IRE → Slight glow

- 4. Input 525 all-white (COMPOSITE signal without burst).
- 5. Set CONT VR to 80%.
- Adjust the all-white luminance so that the screen luminance will be 3 NIT.
- Press MENU and select COL TEMP/BAL.
- 8. Select 6500K.

Set [3200K SW] to "0" for both 9300K and 6500K.

- 9. Put the unit into the service mode.
- Adjust to the standard values with <RED> and <BLUE> of C/T1 6500K BIAS or C/T2 6500K BIAS .
 Set cut-off to 3 NIT.

<GREEN>

Group of models (Table 3-3)	Fix as follows:
2, 3, 5	"400"
1, 4	"512"

- 11. Switch the all-white signal luminance to 100 IRE.
- 12. Adjust to the standard values with <RED> and <BLUE> of C/T1 6500K GAIN or C/T2 6500K GAIN .

Set it to "700."

- 13. Repeat adjustment (10, 11, and 12) until the adjustment is complete, and then write the adjustment data.
- 14. Press MENU and select COL TEMP/BAL.
- 15. Select 9300K.
- 16. Adjust CT2 9300K BIAS CT2 9300K GAIN or CT1 9300K BIAS CT1 9300K GAIN in the same manner as adjustments 1013.

BIAS < GREEN>

Group of models (Table 3-3)	Fix as follows:
2, 3, 5	"400"
1, 4	"512"

GAIN <GREEN>
Fix it at "700."

3-11. Blue-only white balance adjustment

- Turn ON the blue-only of the user controller SW. (To set blue-only.)
- Input all-white (COMPOSITE signal without burst).
 The all-white signal luminance shall be 100 IRE.
 CONT: 80%
 BRT: 50%
- 3. Select COL TEMP/BAL.
- 4. Select 6500K.
- 5. Adjust to the standard values with C/T1 6500K B/O<RED> and C/T1 6500K B/O<GREEN> OF C/T2 6500K B/O<RED> and C/T1 6500K B/O<GREEN>
- 6. Select COL TEMP/BAL.
- 7. Select 9300K.
- 8. Adjust to the standard values with C/T2 9300K B/O<RED> and C/T2 9300K B/O<GREEN> or C/T1 9300K B/O<RED> and C/T1 9300K B/O<GREEN>
- Adjust the all-white signal luminance, and check that the white balance is satisfactory when the luminance of the screen is 8NIT.

3-12. SUB BRT adjustment

- 1. Input a 525 monoscope signal.
- 2. CONT ... MIN BRT CENTER (50&)
- 3. Select SUB BRIGHT in the service mode.
- Adjust SUB BRIGHT so that 10 IRE glows slightly and 0 IRE is cut off.

3-13. Focus adjustment

1. PVM-20M4 Series

- Adjust the H focus (upper side of focus pack) by means of a dot signal
- Adjust the V focus (lower side of focus pack) by means of a dot signal.
- Turn the H focus fully clockwise when viewed from the front by means of a dot signal.
- Turn the H focus counterclockwise and focus well the dot in the center of the screen. When the dot is well focused, it will be divided into two sections.
- 5. Turn the H focus VR clockwise (returning direction) so that the dot will be as shown in Fig.3-30. At that time, both ends of the central section of the screen are in the same state.



Fig. 3-30

- Check that the resolution is more than 800 lines by means of a digital monoscope signal.
- 7. Check that the magenta ring is unconspicuous by means of an all-white signal.

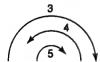


Fig.3-31 Movement of VR when viewed from the front

2. PVM-14M4 Series

- Adjust the H focus (upper side of focus pack) by means of a dot signal.
- Adjust the V focus (lower side of focus pack) by means of a dot signal.
- Turn the H focus fully clockwise when viewed from the front by means of a dot signal.
- Turn the H focus counterclockwise and focus the dot in the center of the screen well. The dot signal is divided into two sections at that time.
- Turn the H focus VR counterclockwise so that the dost will be as shown in Fig.3-32. At that time, both ends of the central section of the screen are in the same state.



Fig. 3-32

- Check that the resolution is more than 800 lines by means of a digital monoscope signal.
- Check that the magenta ring is unconspicuous by means of an all-white signal.

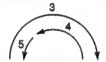
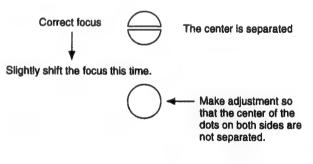


Fig.3-33 Movement of VR when viewed from the front

3. PVM-14M2 Series (CRT14MG)

Make adjustment so that the dots in the central section (right and left edges) will be undivided, respectively. (When well-focused, the dot is divided into two sections.)



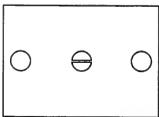


Fig. 3-34

4. PVM-20M2 Series

Focus the character "30" in the center of monoscope well as usually.

SECTION 4 SAFETY RELATED ADJUSTMENT

When the parts (with a M , mark on the circuit diagram) shown below are replaced, confirm the matters described in items 4-1 and 4-2 shown below.

R1536

R551, R506, R519, R518, R516, R515, R508, R517, R1560, R1537, C549, C512, C513, C523, C592, D501, D533, Q500, O511, IC500, and IC507

When the following parts are replaced, check the +B voltage: IC600, IC602, D610, C615, C631, C621, C632, and T603

Confirmation procedure

- 1. Input 120 VAC.
- Input a monoscope signal, and minimize CONTRAST and BRIGHT.
- 3. Check that the voltage of the CN605 @ pin is 115.7 VDC.

4-1. CONFIRAMATION OF +B MAXIMUM

Standard: Less than 115.7 VDC (CN605 pin (3)) Check Condition Input voltage: 130 VAC

Note: Use NF Power Supply or make sure that distortion factor is

3% or less.

Input signal: Monoscope

Controls: BRT & CONT → Normal

4-2. CONFIRAMATION OF HOLD-DOWN CIRCUIT

Check Condition Input voltage: 130 VAC

Input signal: White &Dot

Controls: BRT & Cont → Max. & Min.

4-2-1.Hold-Down Circuit (+B)

- a) Adjust the beam current to 600±50µA with the pin ♠ of CN605 with the external DC power supply (less than 127.0 VDC) to the point just before the hold-down circuit works.

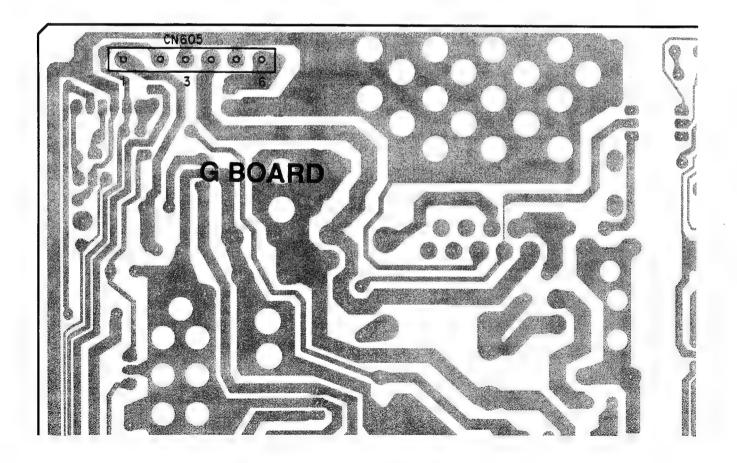
 Input Signal: White
- Adjust the beam current to 80±20μA with the pin (4) of CN605 with the external DC power supply (less than 127.0 VDC) to the point just before the hold-down circuit works.
 Input Signal: Dot

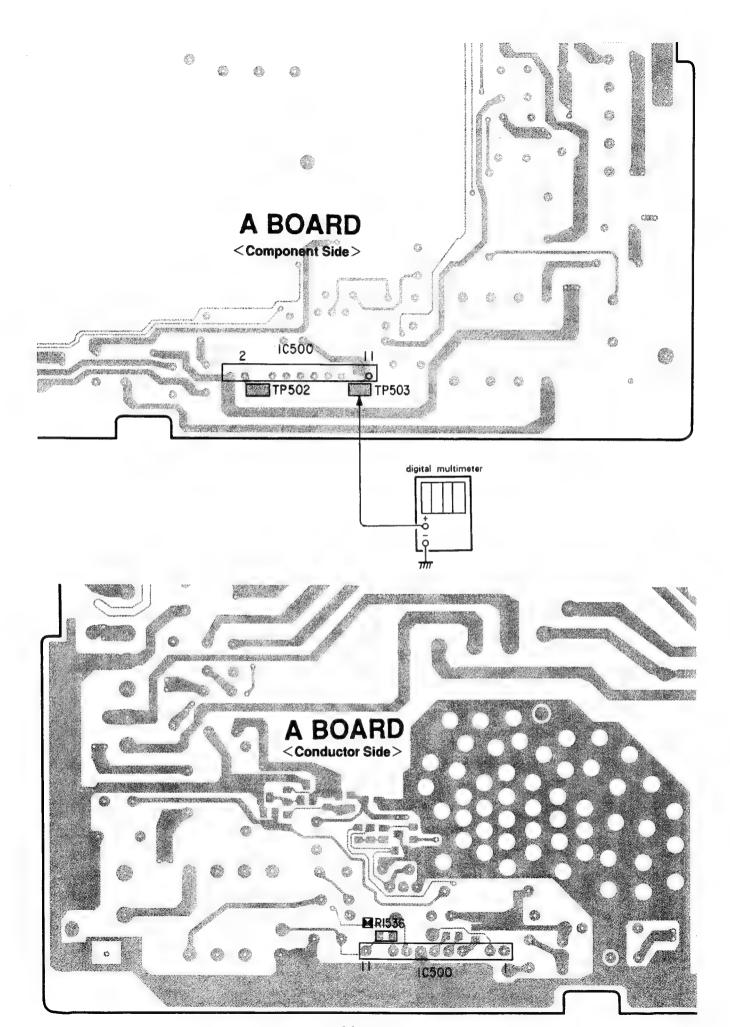
4-2-2. Hold-Down Circuit (3rd Wire voltage of FBT)

Check item: Check of pin 10 of IC500 voltage: more than 110.0VDC

- a) Adjust the beam current to 600±50µA with the pin ① of IC500 with the external DC power supply (less than 141.0 VDC)to the point just before the hold-down circuit works.

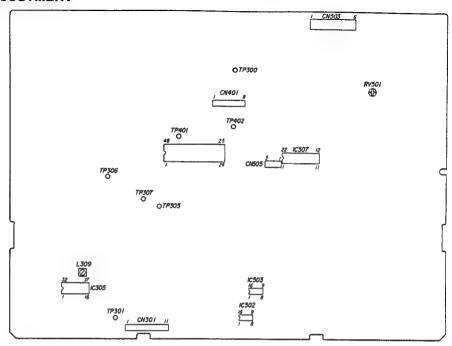
 Input Signal: White
- Adjust the beam current to 80±20μA with the pin ① of IC500 with the external DC power supply (less than 141.0 VDC) to the point just before the hold-down circuit works.
 Input Signal: Dot





SECTION 5 CIRCUIT ADJUSTMENTS

5-1. A BOARD ADJUSTMENT



1. PREPARATION/SIGNAL SPECIFICATIONS

1. Signal specifications

 Supply a composite video or component signals from the CN301 connector. Refer to Table 5-1 to take into consideration the effect on the Q board.

The level of the signal to supply should equal to values shown in Table 5-1 plus/minus 2% max.

Table 5-1

Signal		Details ofsignal	Standard level (Pedestal white)	Reduction rate %	Connector supply level (P·W)
		100% white	0.714V	93%	0.664V
	358NT)	75% white	0.536V	•	0.498V
Composite video (75% color	443NT }	Burst (Green section) (P-P for this item only)	286mV (632mV)	94% (94%)	269mV (594mV)
bar)		100% white	0.7V	*	0.651V
	PAL	75% white	0.525V	,	0.488V
	SECAM }	PAL burst (Green section) (P-P for this item only)	300mV (664mV)	94% (94%)	282mV (624mV)
		100% white	0.7V	94.8%	0.664V
	BETA 0	75% white	0.525	•	0.498V
Compo- nent		75% color B-Y, R-Y (P-P for this item only)	0.7V	•	0.664V
(75% color		100% white	0.7V	*	0.664V
bar)		75% white	0.525V *	•	0.498V
	SMPTE	75% color B-Y, R-Y (P-P for this item only)	0.525	•	0.498V

2. Preparation

 In this chapter, indicates the control items in the service mode.

Example: 60 H-FRQ

Write the applicable model data at the location of NO.114 MODEL in the service mode.

Group of models 4 ... 0

Group of models 5 ... 1

Group of models 1 ... 5

Group of models 2 ... 6

Group of models 3 ... 8

* Refer to Table 5-2 for the following groups of models.

Table 5-2

Group of models		Models	
1	PVM-14M4U PVM-14M4A	PVM-14M4J	PVM-14M4E
2	PVM-14M2U	PVM-14M2E	PVM-14M2A
3	PVM-14M1J		
4	PVM-20M4U PVM-20M4A	PVM-20M4J	PVM-20M4E
5	PVM-20M2U	PVM-20M2E	

CONT 80% is the center click position of the user controller.

2. ADJUSTMENT OF DEFLECTION SYSTEM

1. Adjustment of horizontal oscillation frequency

- 1. Input a 525 monoscope signal.
- 2. CONT ... 80% BRT ... 50%
- 3. Set the unit in the service mode.

 Connect the IC507 ① PIN on the A board to GND via the 100μ/ 16V chemical capacitor. (Use CN505③ PIN for GND.) Or insert the H-FREQ jig into CN505.

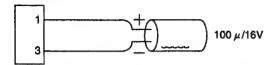


Fig.5-1 H-FREQ jig

- Adjust 60 H-FREQ so that the slanting lines on the screen will be vertical. (Fig.5-2)
- 6. Input a 625 monoscope signal.
- Adjust 50 H-FREQ so that the slanting lines on the screen will be vertical. (Fig. 5-2)

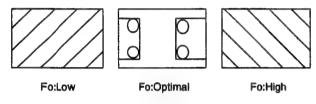


Fig.5-2

2. H BLANKING adjustment

- 1. Input a 525 monoscope signal.
- 2. CONT ... 80% BRT ... 50%
- 3. Set the unit in the service mode.
- Observe the anode of TP300 or D516 with an oscilloscope, and adjust <u>H-BLANKING</u> so that the waveform will be as shown in Fig.5-3.

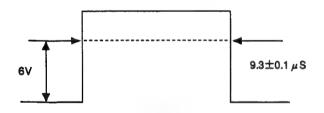


Fig.5-3

3. Picture phase adjustment

- 1. Input a 525 monoscope signal.
- 2. Set the unit in the UNDER SCAN mode.
- 3. CONT ... Min. BRT Max.
- 4. Set the unit in the service mode.
- Adjust <u>UNH-SIZE</u> so that the white frame of the monoscope will be approx. 1 cm to the inside of the effective screen.
- 6. Turn RV501 (H-CENT) so that B = B'.
- Adjust 60 VIDEO FRASE so that the signal area will be in the center (A = A') of the deflection area. (Fig.5-4)
- 8. Input a 625 monoscope signal.
- 9. Adjust 50 VIDEO PHASE in the same manner.

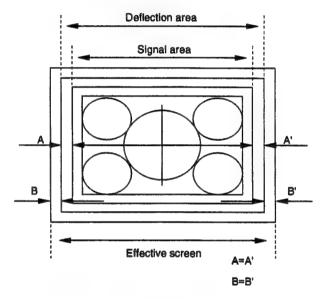


Fig.5-4

4. V BLANKING adjustment

- 1. Input a 525 monoscope signal.
- 2. Set the unit in the UNDER SCAN mode.
- 3. CONT ... Min. BRT ... Max.
- 4. Set the unit in the service mode.
- Adjust V-BLANKING <600 so that the white frame in the upper section of the monoscope will be about to be blanked.

Note: Blanking up to the point 1H away from the white frame is permissible, but the adjusting center should be up to the point 0.5H away from the frame.

- Cancel the UNDER SCAN mode, and set the unit in the normal 16:9 mode.
- Adjust 16:9 BLANKING START 60> and 16:9 BLANKING END 60> so
 that the number of frames in the vertical direction in the luminous section of the screen will be 11.74 and the BLK quantity at
 the top and bottom will be the same.

Note: Make adjustment before 16:9 V-SIZE adjustment.

- 8. Input a 625 monoscope signal.
- 9. In the same way as 5. shown above, adjust V-BLANKING <50>.
- 10. Adjust [16:9 BLANKING START < 50> and [16:9 BLANKING END < 50>], in the same was as 6. and 7., so that the number of frames in the vertical direction in the luminous section of the screen will be 11.2 and the BLK quantity at the top and bottom will be the same.

5. Vertical deflection adjustment

- 1. Input a 525 monoscope signal.
- 2. CONT ... 80% BRT ... 50%
- 3. Set the unit in the service mode.
- 4. Roughly adjust NOR 60 V.SIZE so that the size will be 12 frames. Adjust V.LIN with VLIN.

Adjust CENT with V.CENT.

V.CENT must be reviewed after adjustment of V.LIN.

Adjust NOR 60 V.SIZE so that it will equal the standard value.

- 5. Set the unit in the 16:9 mode by the user controller SW.
- 6. Make the same adjustment with 16:9 NOR V.SIZE <60>.
- 7. Set the unit in the NORMAL SCAN mode.
- 8. Input a 625 signal.
- Adjust NOR 50 V.SIZE so that the SIZE will equal the standard value.
- 10. Set the unit in the 16:9 mode.
- 11. Adjust 16:9 NOR V.SIZE <50> so that it will equal the standard value.

Table 5-3 NORMAL V. SIZE standard

		525 625	
4:3	1	11.75±0.2 frames	11.2±0.2 frames
10.0	14"	154mm	4
16:9	20"	217mm	—

6. Horizontal deflection adjustment (Normal scan adjustment)

- 1. Input a 525 monoscope signal.
- 2. CONT ... 80% BRT 50%
- 3. Set the unit in the service mode.
- 4. Rough adjustment of H.SIZE

Roughly adjust NOR H.SIZE so that H.SIZE will be 15.75 frames.

 Adjust the horizontal deflection by means of NOR PIN AMP, NOR PIN PHASE, NOR U.PIN AMP, SEXY, V BOW, V ANGL, NOR H SIZE, L PIN AMP, and L V BOW.

(While correcting a distorted parallelogram and curvature with V.ANGL and BOW, make adjustment so that the horizontal and vertical lines of the screen will be straight.)

- 6. Set the unit in the 16:9 mode.
- 7. Make the same adjustment as 5. with 16:0 NOR PIN AMP and 16:9 NOR PIN PHASE

Table 5-4 NORMAL H. SIZE standard

	525	625
4:3	11.75±0.2 frames	15.0±0.2 frames
16:9	11.75±0.2 frames	15.0±0.2 frames

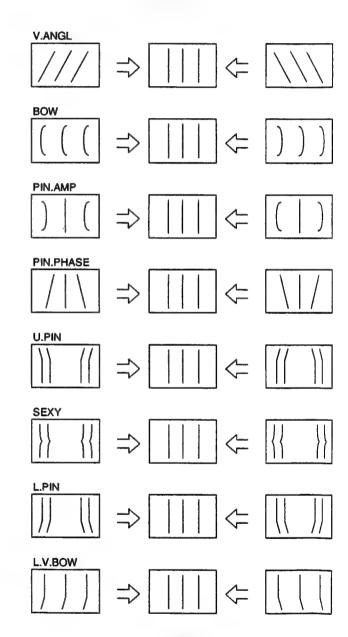


Fig.5-5

Horizontal deflection adjustment (UNDER SCAN adjustment)

- 1. Input a 525 monoscope signal.
- 2. CONT ... 80% BRT 50%
- 3. Set the unit in the U/S mode.
- 4. Set the unit in the service mode.
- Adjust <u>U/S V SIZE <600</u> so that UNDER V.SIZE will be within the standard.
- Adjust <u>U/S H SIZE</u> so that UNDER H.SIZE will be within the standard.
- Adjust <u>U/S PIN AMP</u> and <u>U/S PIN-PHASE</u>. (Adjust tracking according to 5., 6., and 7.)
- After adjustment, the white frame of the monoscope shall not be out of the effective screen.
- 9. Set the unit in the 16:9 mode.
- 10. Make the same adjustment with 5. and 7. by means of 16:9 U/S V SIZE <60>, 16:9 U/S PIN-AMP and 16:9 U/S PIN-PHASE.

Table 5-5
Standerd values for groups of models 1, 2, and 3 (14")

	525	625
U/S H-SIZE V-SIZE	252mm 188mm	-
16 : 9 U/S V-SIZE	142mm	4

Table 5-6
Standerd values for groups of models 4 and 5 (20")

	525	625
U/S H-SIZE V-SIZE	364mm 272mm	-
16 : 9 U/S V-SIZE	205mm	4

- 11. Set the unit in the 16:9 mode.
- 12. Input a monoscope signal.
- 13. Make the same adjustment with 5. by means of U/S V SIZE < 50>.
- 14. Set the unit in the 16:9 mode.
- 15. Make the same adjustment with 5. by means of 16:9 U/SV SIZE <50>.

Note: If there is not time enough for adjustment (5. Vertical deflection adjustment and 6. and 7. Horizontal deflection adjustment), confirm that the respective sections will operate normally and that adjustment is possible, and then input standard adjustment values.

8. H/V-DELAY adjustment

Note: This item applies only to groups of models 1, 2, 4, and 5.

- 8-1. H-DELAY adjustment
- 1) Input a 525 monoscope signal.
- 2) CONT ... 80% BRT 50%
- 3) Set the unit in the H/V DELAY mode.
- 4) Set the unit in the service mode.
- 5) Connect the probe of an oscilloscope to IC503 ⑦ PIN. Adjust H DELAY so that the output waveform will be as shown in Fig.5-6.

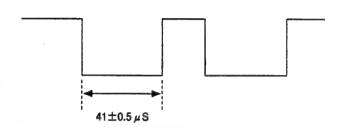


Fig.5-6

- 8-2. V-DELAY adjustment
- 1) Input a 525 monoscope signal.
- 2) CONT ... 80% BRT 50%
- 3) Set the unit in the H/V DELAY mode.
- 4) Set the unit in the service mode.
- 5) Connect the probe of an oscilloscope to IC502 PIN. Adjust VDELAY so that the output waveform will be as shown in Fig.5-7

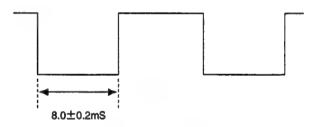
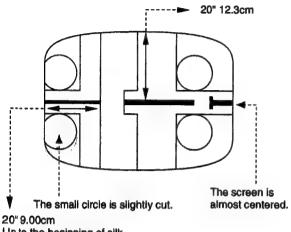


Fig.5-7

8-3. Confirmation of screen Confirm that the screen is as shown in Fig.5-8.



Up to the beginning of silk

Fig.5-8

9. Writing adjustment results

Write the adjustment results.

Note: Do not turn off the power before writing the adjustment results; otherwise, they will all be lost.

3. Signal system adjustment

1. SUB CON adjustment during NORM and H/V DL

Note: H/V-DL is not applicable to the group of models 3. Adjustment must be completed before the HUE adjustment of NTSC358/443.PAL.

1. Input a vertical white line signal.

Note: Use a vertical white line signal (without 525 burst; H width of 3µS; 100IRE).

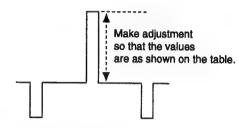
- 2. CONT ... 80% BRT 50%
- 3. Connect the probe of an oscilloscope to CN401 3 PIN on the A hoard.
- Set the unit in the service mode.
- 5. Temporarily input "69" as an adjustment value for SUB.BRIGHT. Set the values in Table 5-7 as BIAS and GAIN data of C.TEMP1 and C.TEMP2.

Table 5-7

Group of models	1, 4	2, 3, 5
BIAS GREEN	512	400
GAIN GREEN	700	700

6. Adjust the pedestal or the distance between SYNCTIP and WHITE by means of SUB CON <4:3, NOR>

SUB CON <4:3, H/V DELAY, SUB CON <16:9, NOR, and SUB CON <16:9, NOR> SUB CON <4:3. NOR> SUB CON <16:9. NOR> (Fig.5-9)

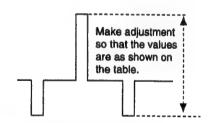


SUB-CON 4:3, H/V-DL SUB-CON 16:9, H/V-DL

Group of models	4	1	5	2	3
4:3	1.39Vp-p	1.16Vp-p	1.37Vp-p	1.47Vp-p	1.47Vp-p
16:9	1.22Vp-p	1.04Vp-p	1.19Vp-p	1.32Vp-p	1.32Vp-p

Fig. 5-9

SUB CON <4:3. H/V DELAY> SUB CON <16:9. H/V DELAY> (Fig.5-10)



SUB-CON 4:3. H/V-DL SUB-CON 16:9. H/V-DL

Group of models	4	1	5	2
4:3	1.39Vp-p	1.16Vp-p	1.37Vp-p	1.47Vp-p
16:9	1.22Vp-p	1.04Vp-p	1.19Vp-p	1.32Vp-p

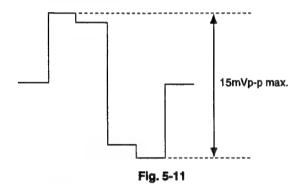
Fig. 5-10

Note: Not applicable to PVM-14M1J

2. SUB PHASE adjustment

Note: Not applicable to the group of models 3.

- Input a component color bar (R-Y) and EXT SYNC. (BETA 0 level signal)
- 2. Set the unit in the EXT SYNC mode for component input.
- 3. Connect the probe of an oscilloscope to IC404 @ PIN or TP402.
- 4. Set the unit in the service mode.
- Adjust SUB PHASE so that the output waveform will be minimum (15 mVp-p or less). (Fig.5-11)



3. SUB PHASE adjustment

Note: Not applicable to groups of models 1, 2, 4, and 5.

- 1. Input an NTSC color bar.
- Connect L309 to GND and TP307 to 5V line (L320 line), respectively.
- 3. Set the unit in the service mode.
- Adjust SUB PHASE so that the output waveform will be minimum (15 mVp-p or less). (Fig.5-11)

4. SUB CHROMA adjustment

Note: Not applicable to the group of models 3.

- Input component color bars (R-Y, Y, and B-Y). (BETA 0 level signal)
- 2. Set COMPONENT LEVEL to BETA 0 via MENU.
- 3. Connect the probe of an oscilloscope to IC404 @ PIN or TP402.
- 4. Set the unit in the service mode.
- Adjust <u>SUB CHROMA NORMAL</u> so that the peaks of waveforms will be flush with each other as shown in Fig.5-12.

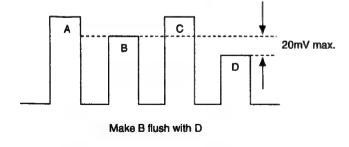


Fig. 5-12

5. SUB COL adjustment

Note: Not applicable to groups of models 1, 2, 4, and 5.

- 1. Set the unit in the service mode.
- 2. Input adjustment value 98 to SUB CHROMA NORMAL. (Fig.5-12)

6. R-Y LEVEL adjustment

Note: Not applicable to the group of models 3.

- Input component color bars (R-Y, Y, and B-Y). (BETA 0 level signal)
- 2. Set COMPONENT LEVEL to BETA 0 via MENU.
- 3. Connect the probe of an oscilloscope to IC404 PIN or TP401.
- 4. Set the unit in the service mode.
- 5. Adjust R-Y LEVEL COMPONENT so that the peaks of waveforms will be flush with each other as shown in Fig.5-13.

Make adjustment so that B = D as shown above. (20 mV max.) Check that the difference between B and C is 30 mV or less.

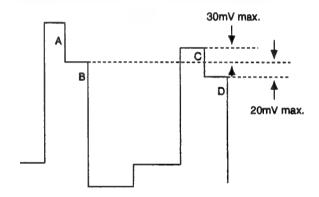


Fig. 5-13

7. SUB CHROMA N10/SMPTE

Note: Not applicable to the group of models 3.

- Input component color bars (R-Y, Y, and B-Y). (SMPTE level signal)
- 2. Set COMPONENT LEVEL to N10/SMPTE via MENU.
- 3. Connect the probe of an oscilloscope to IC404 30 PIN or TP402.
- 4. Set the unit in the service mode.
- 5. Adjust SUB CHROMA SMPTE so that the levels of B and D will be the same. (Fig.5-14)

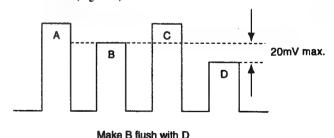


Fig. 5-14

8. Adjustment of burst gate pulse width

- 1. Input an NTSC color bar.
- Connect the probe of an oscilloscope to TP301 (COMP-SYNC) and Q363 (E) or IC305 ① PIN. (Exercise care since IC305 (1) PIN is a high-impedance line.)
- 3. Set the unit in the service mode.
- Adjust BGF WIDTH so that the output waveforms will be as shown in Fig.5-15.

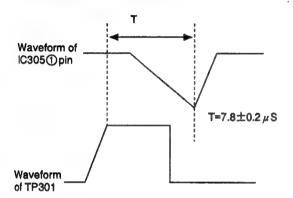
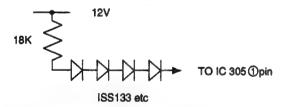


Fig. 5-15

9. VXO adjustment

- 9-1. X'tal 358
- 1) Input an NTSC color bar.
- 2) Connect a frequency counter to IC305 ② PIN.
- 3) Set the unit in the service mode.
- 4) Connect IC305 ① PIN as shown in Fig.5-16.
- Adjust NTSC CRYSTAL so that the counter reading will be within the standard values shown below. (Adjustment may be made at a point at which the color flickering stops.)

X'tal 358 standard vlaue: 3579545±20 Hz



(Arrange 4 Di's as close as possible to ①PIN at the shortest possible distance.)

Fig. 5-16

9-2. X'tal 443

- 1) Input a 443 NTSC color bar.
- 2) Connect a frequency counter to IC305 @ PIN.
- 3) Set the unit in the service mode.
- Connect IC305 (1) PIN in the same way as 9.-4) in 9. VXO adjustment.
- Adjust NTSC 443 CRYSTAL in the same way as 9.-5) in 9. VXO adjustment.

X'tal 443 standard value: 4433619±20 Hz

10. NTSC - NTSC443 - PAL color demodulation adjustment

Note: 10-1, is not applicable to the group of models 3.

10-1. NT358PHASE (NORMAL)

- 1) Input an NTSC color bar.
- 2) Connect the probe of an oscilloscope to TP306.
- 3) Set the unit in the H/V DELAY mode.
- 4) Set the unit in the service mode.
- Adjust PHASE NTSC 358 NOR so that the burst section of the output waveform will be straight. (Fig.5-17)

10-2. NT 358 PHASE (ACC OFF)

- 1) Conduct ACC OFF via MENU.
- Make adjustment in the same way as 10-1, shown above by means of PHASE NTSC 443 ACC OFF. (Fig. 5-17)

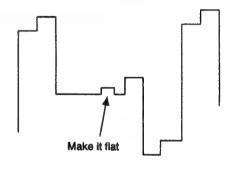


Fig. 5-17

10-3. NT 358 B-Y PHASE

Note: Make adjustment after PHASE adjustment and before CHROMA adjustment.

- Input an NTSC color bar. (Input only the R-Y component. B-Y and Y should be OFF.)
- 2) Connect the probe of an oscilloscope to TP305.
- 3) Set the unit in the service mode.
- Adjust <u>B-Y PHASE NTSC 358</u> so that the color components will be straight.

10-4. NT 358 CHROMA (NORMAL)

- 1) Input an NTSC color bar.
- 2) Connect the probe of an oscilloscope to IC404 **②** PIN or TP402.
- 3) Set the unit in the service mode.
- 4) Adjust CHROMA NTSC 358 NOR so that the peaks of waveforms will be flush with each other as shown in Fig.5-18.

10-5. NT 358 CHROMA (ACC OFF)

Note: 10-5. is not applicable to the group of models 3.

- 1) Conduct ACC OFF via MENU.
- Adjust CHROMA NTSC 358 ACC OFF in the same way as 10-4. shown above. (Fig.5-18)

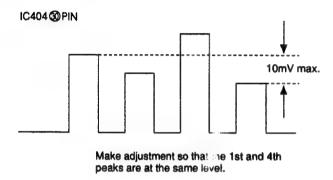
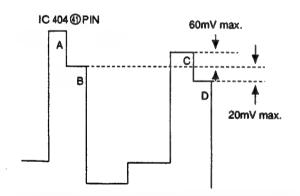


Fig. 5-18

10-6. NTSC 358 R-Y LEVEL

Note: Be sure to set ACC in the ON position before this adjustment.

- 1) Input an NTSC 358 color bar.
- 2) Connect the probe of an oscilloscope to IC 404 @PIN or TP401.
- 3) Set the unit in the service mode.
- 4) Adjust R-Y LEVEL NTSC 358 so that the peaks of waveforms will be flush with each other as shown in Fig. 5-19.



Make adjustment so that B=D as shown above.(20mV max.) Check that the difference between B and C is less than 60mV.

Fig. 5-19

10-7. NTSC 443 PHASE (NORMAL)

Note: 10-7-3). is not applicable to the group of models 3.

- 1) Input an NTSC 433 color bar.
- 2) Connect the probe of an oscilloscope to TP306.
- 3) Set the unit in the H/V DELAY mode.
- 4) Set the unit in the service mode.
- Adjust PHASE NTSC 443 NOR so that the burst section of the output waveform will be straight. (Fig. 5-20)

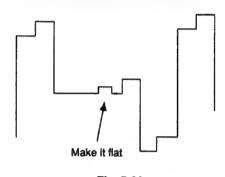


Fig. 5-20

10-8. NTSC 443 PHASE (ACC OFF)

Note: 10-8. is not applicable to group of models 3.

- 1) Conduct ACC OFF via MENU.
- Adjust PHASE NTSC 443 ACC OFF in the same way as 10-7-5). (Fig.5-21)

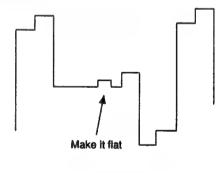


Fig. 5-21

10-9. NTSC 443 B-Y PHASE NTSC 443 CHROMA NOR

Note: Be sure to set ACC in the ON position before this adjust-

ment

Note: Remove HV.DELAY before this adjustment.

- 1) Input an NTSC 443 color bar.
- 2) Connect the probe of an oscilloscope to TP402.
- 3) Set the unit in the service mode.
- 4) While tracking by means of <u>B-Y PHASE NTSC 443</u> and <u>CHROMA NTSC 443 NOR</u>, make adjustment so that the peaks of waveforms will be the same. (Fig.5-22)

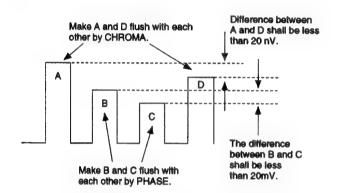


Fig. 5-22

10-10. NTSC 443 CHROMA (ACC OFF)

Note: 10-10. is not applicable to the group of models 3.

- 1) Conduct ACC OFF via MENU.
- Adjust [CHROMA NTSC 443 ACC OFF] in the same way as 10-9-4). (Fig.5-23)

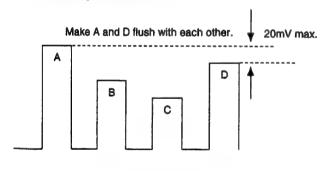


Fig. 5-23

10-11. NT 443 R-Y LEVEL

Note: Be sure to set ACC in the ON position before this adjustment.

- 1) Input an NTSC 443 color bar.
- 2) Connect the probe of an oscilloscope to TP401.
- 3) Set the unit in the service mode.
- 4) Adjust R-Y LEVEL NTSC 443 in the same way as 10-6-4). (Fig.5-24)

Make adjustment so that B = D. (20 mV max.) Check that the difference between B and C is 60 mV or less.

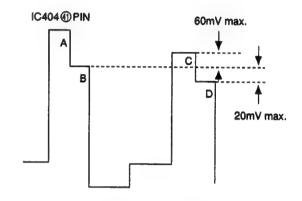
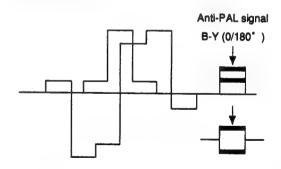


Fig. 5-24

10-12. PAL PHASE (NORMAL)

- 1) Input a PAL SP color bar.
- 2) Connect the probe of an oscilloscope to TP306.
- 3) Set the unit in the service mode.
- 4) Adjust PHASE PAL NOR so that the waveform of the B-Y anti-PAL signal will be "0."



*The signal waveform differs slightly every hour. Adjust it to "0."

Fig. 5-25 R-Y OUT

10-13. PAL PHASE (ACC OFF)

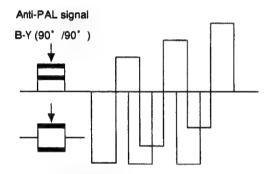
Note: 10-13, is not applicable to the group of models 3.

- 1) Conduct ACC OFF via MENU.
- 2) Adjust PHASE PAL ACC OFF in the same way as 10-12-4).

10-14. PAL B-Y PHASE

Note: Be sure to set ACC in the ON position before this adjust-

- 1) Input a PAL SP color bar.
- 2) Connect the probe of an oscilloscope to TP305.
- 3) Set the unit in the service mode.
- Adjust <u>B-Y PHASE PAL</u> so that the waveform of the R-Y anti-PAL signal will be "0." (Fig.5-26)



*The signal waveform differs slightly every hour. Adjust it to "0."

Fig. 5-26 B-Y OUT

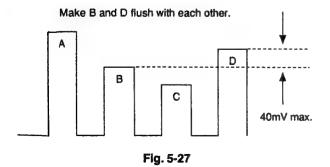
10-15. PAL CHROMA (NORMAL)

- 1) Input a PAL color bar.
- 2) Connect the probe of an oscilloscope to IC404 @ PIN or TP402.
- 3) Set the unit in the service mode.
- 4) Adjust CHROMA PAL NOR so that the peaks of waveforms will be flush with each other. (Fig.5-27)

10-16. PAL CHROMA (ACC OFF)

Note: 10-16, is not applicable to the group of model 3.

- 1) Conduct ACC OFF via MENU.
- Adjust CHROMA PAL ACC OFF in the same way as 10-15-4). (Fig.5-27)



10-17. PAL R-Y LEVEL

Note: Be sure to set ACC in the ON position before this adjustment

- 1) Input a PAL color bar.
- 2) Connect the probe of an oscilloscope to IC404 @ PIN or TP401.
- 3) Set the unit in the service mode.
- 4) Adjust R-Y LEVEL PAL so that the peaks of waveforms will be flush with each other as shown on the right, (Fig. 5-28)

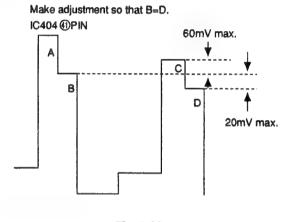


Fig. 5-28

11. SECAM adjustment

Note: Make adjustment after deflection adjustment.

Note: Subject to H-FREQ, H-BLK, VIDEO-PHASE, ANGLE,

BOW, H-DELAY, etc.

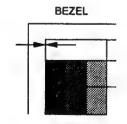
Note: 11. SECAM adjustment is not applicable to the group of models 3.

11-1. HP WIDTH (NORMAL) adjustment

1) Input a SECAM color bar.

Note: The board is roughly adjusted in 11-1., and IC317 1 PIN pulse width may be used for control.

- 2) Set the unit in the UNDER SCAN mode.
- 3) Set the unit in the service mode.
- Adjust HP WIDTH NOR so that the color section at the left edge of the upper portion of the screen is about to disappear. (Fig. 5-29)



Make adjustment so that colors are about to disappear.

Fig. 5-29

11-2. Writing HP.WIDTH (NORMAL) data

Note: Not applicable to groups of models 1, 2, 4, and 5.

- 1) Set the unit in the service mode.
- 2) Input 102 to HP.WIDTH (NOR).

11-3. HP POSITION adjustment

Note: 11-3. is not applicable to the group of models 3.

- 1) Input a SECAM color bar.
- 2) Set the HV-DL mode.
- 3) Set the unit in the service mode.
- 4) Adjust HP POSITION as shown in Fig.5-30.

Note: The same as 11-3. The phase relationship between the beginning of IC317 ® PIN pulse and the input VIDEO signal may be used for control.

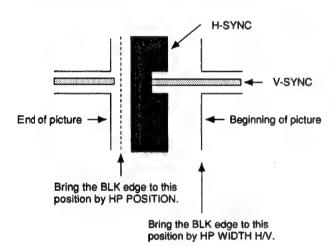


Fig. 5-30

11-4. HP WIDTH (H/V-DL) adjustment

Note: 11-4. is not applicable to the group of models 3.

- 1) Input a SECAM color bar.
- 2) Set the unit in the HV-DELAY mode.
- 3) Set the unit in the service mode.
- 4) Adjust [HF WIDTH H/V-DELAY] as shown in Fig.5-30. (Note: Check HP POSITION. If it is not in position, repeat 2) and 3).)

11-5. SECAM COL BALANCE

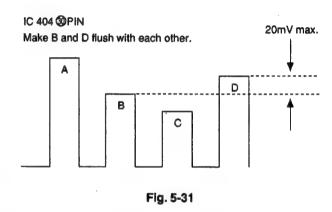
Note: 11-5. is not applicable to the group of models 3.

- 1) Input a SECAM color bar.
- 2) Connect the probe of an oscilloscope to TP306.
- 3) Set the unit in the service mode.
- Adjust <u>SECAM COLOR BALANCE R-Y</u> so that the level in the achromatic color will be straight.

- 5) Connect the probe of an oscilloscope to TP305.
- Adjust <u>SECAM COLOR BALANCE B-Y</u> so that the level in the achromatic color will be straight.

11-6. SECAM CHROMA

- 1) Input a SECAM color bar.
- 2) Connect the probe of an oscilloscope to IC404 **②** PIN or TP402.
- 3) Set the unit in the service mode.
- Adjust <u>CHROMA SECAM</u> so that the peaks of waveforms will be flush with each other as shown in Fig.5-31.



11-7. SECAM R-Y LEVEL

- 1) Input a SECAM color bar.
- 2) Connect the probe of an oscilloscope to IC404 @ PIN or TP401.
- 3) Set the unit in the service mode.
- 4) Adjust R-Y LEVEL SECAM so that the peaks of waveforms will be flush with each other as shown in Fig.5-32.

IC404 (PIN Make adjustment so that B=D.

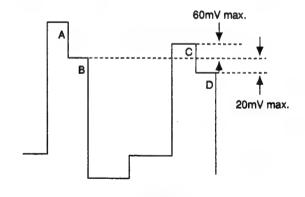


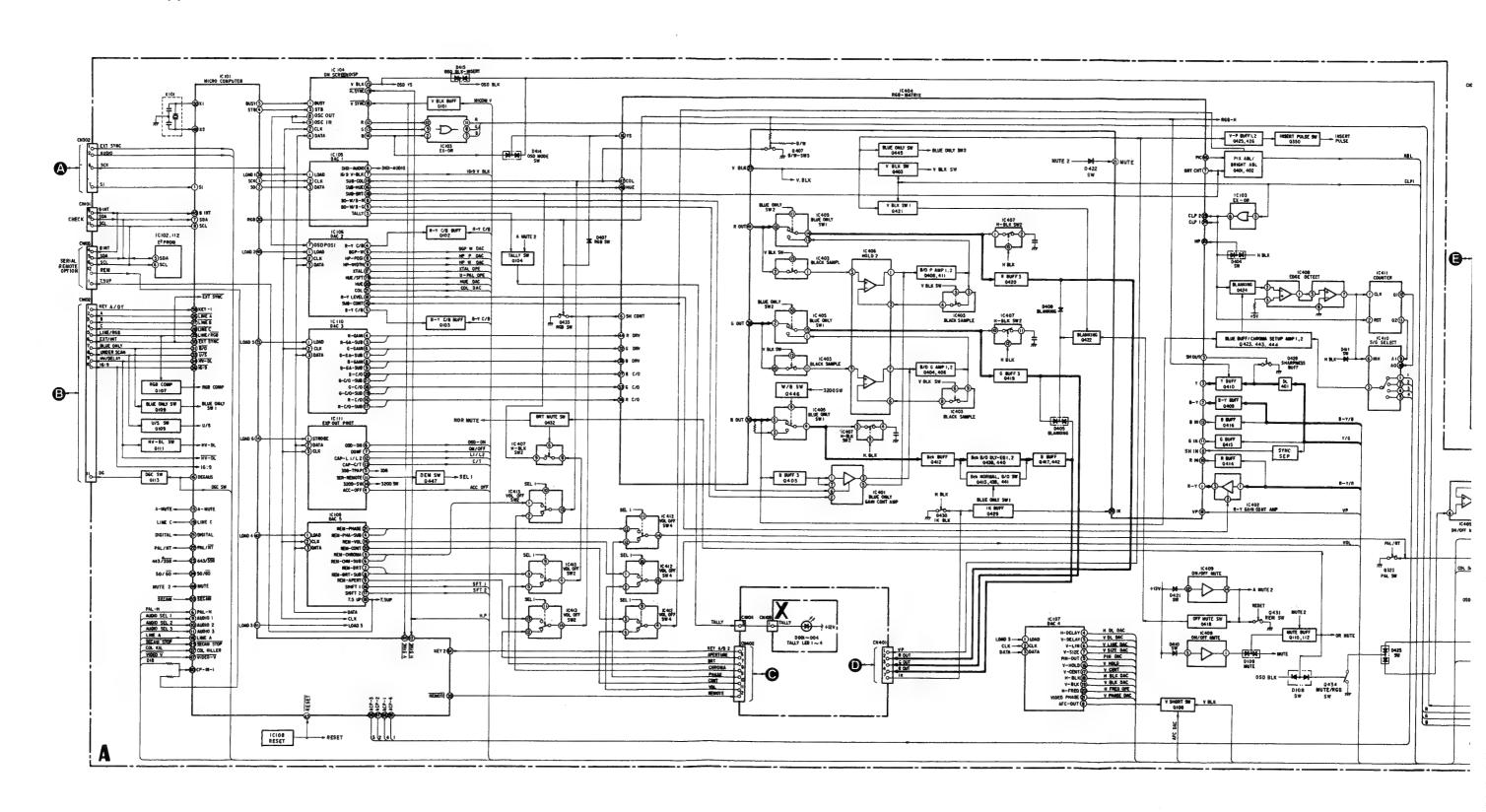
Fig. 5-32

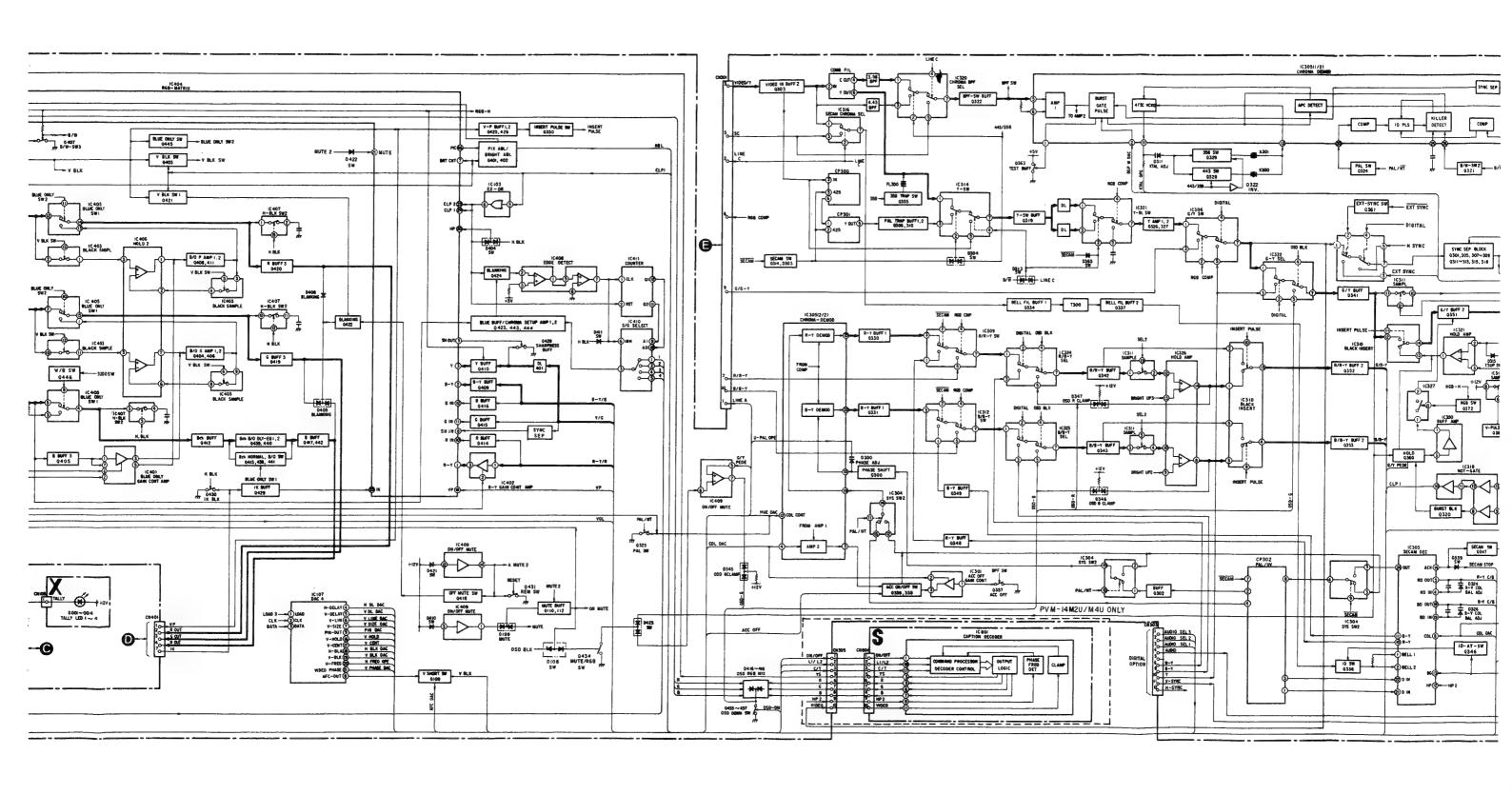
12. Writing adjustment results

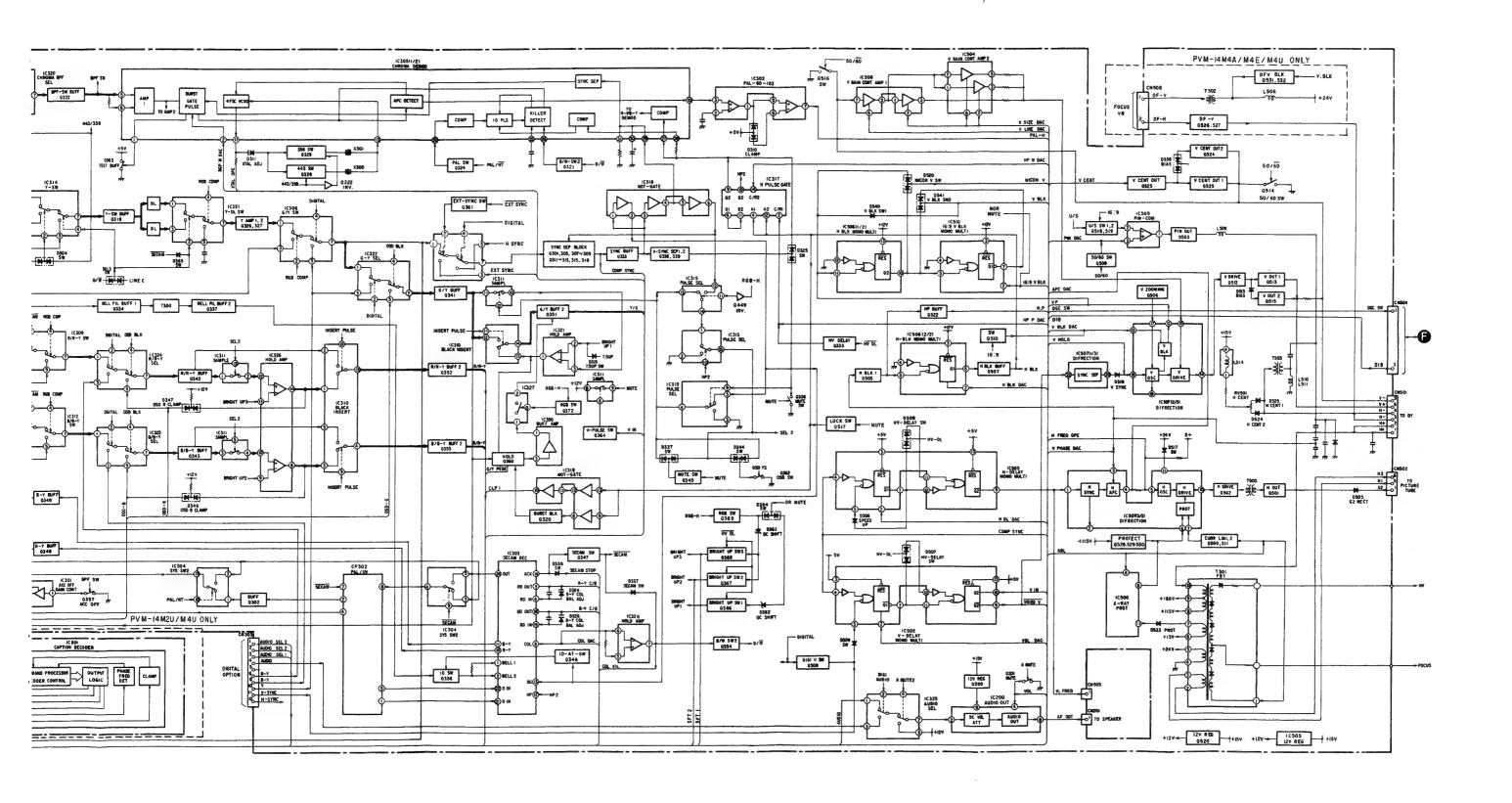
Write adjustment results in the memory.

SECTION 6 DIAGRAMS

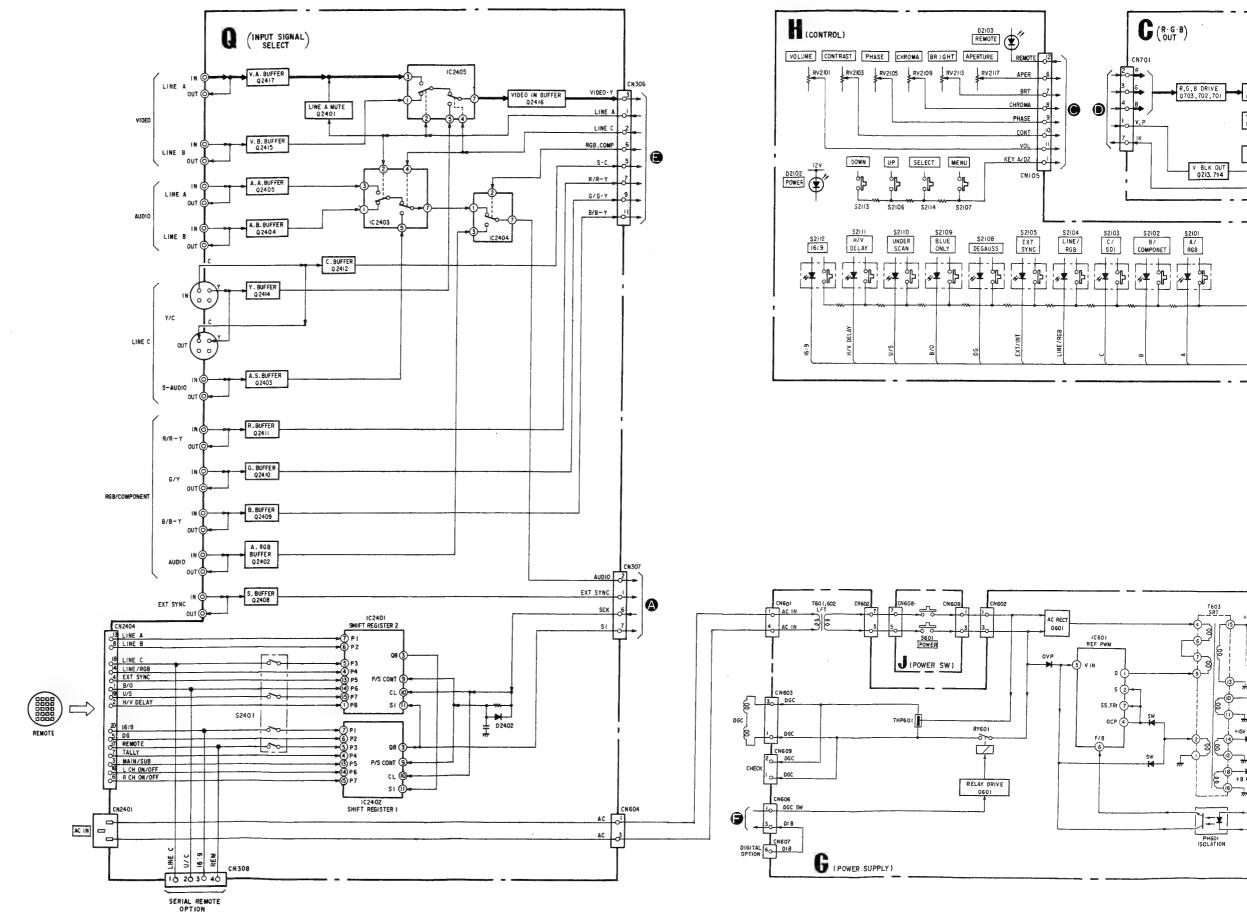
6-1. BLOCK DIAGRAMS (1)

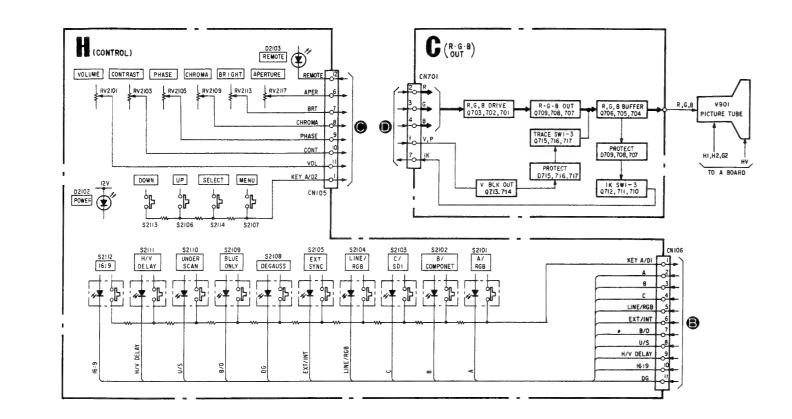


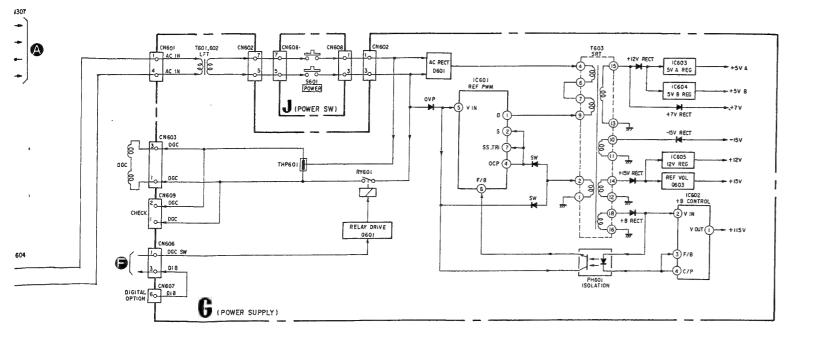




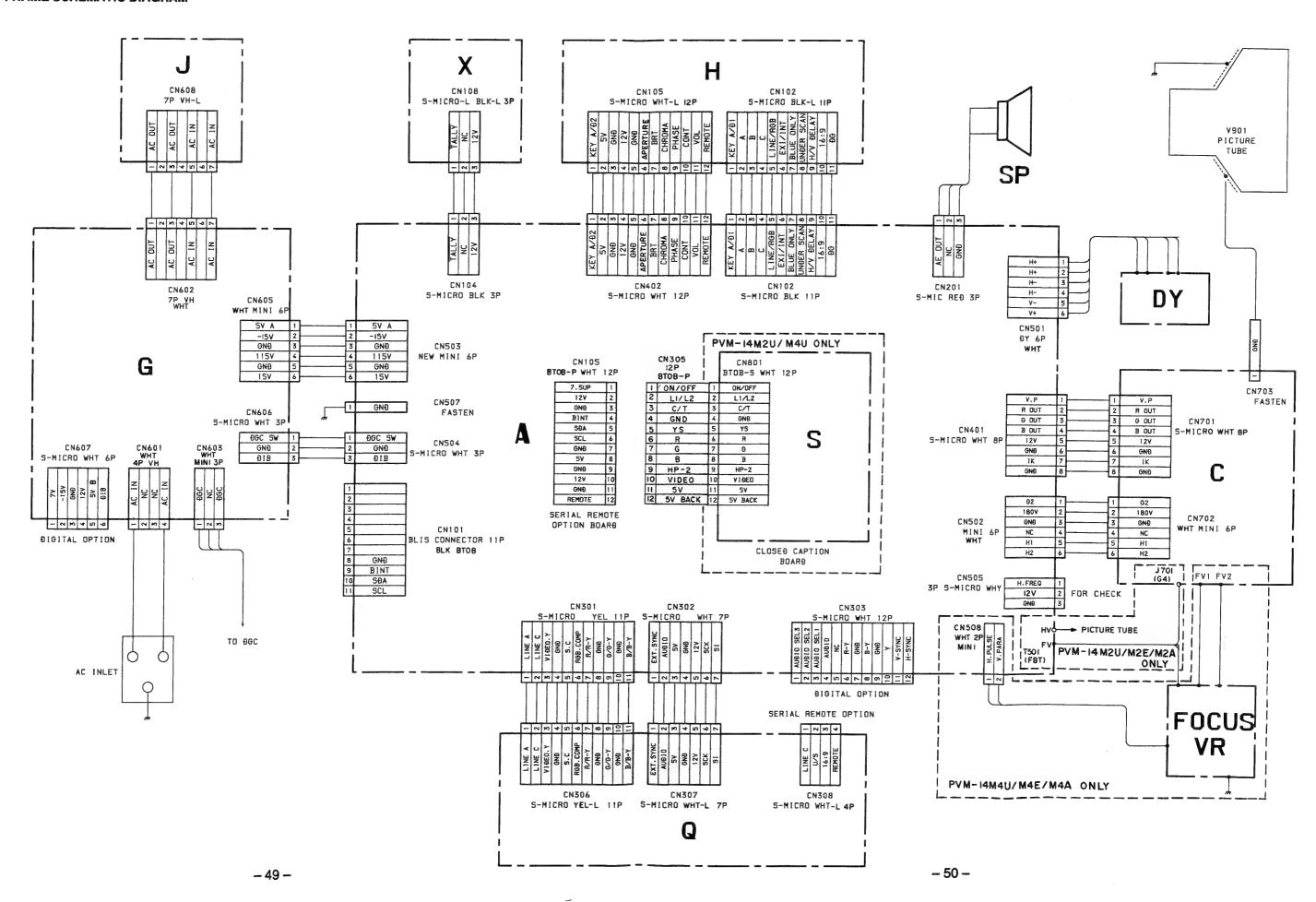
BLOCK DIAGRAMS (2)

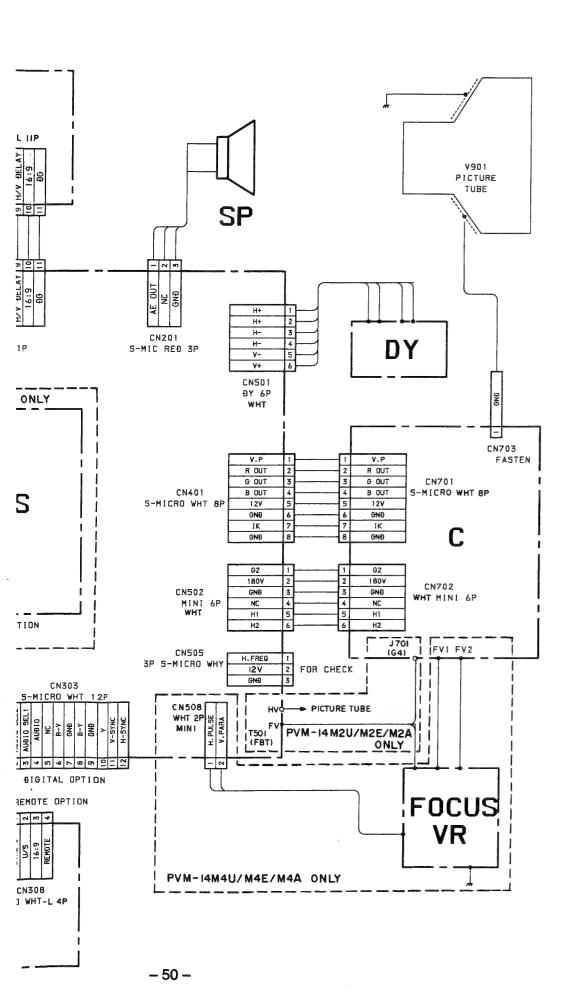


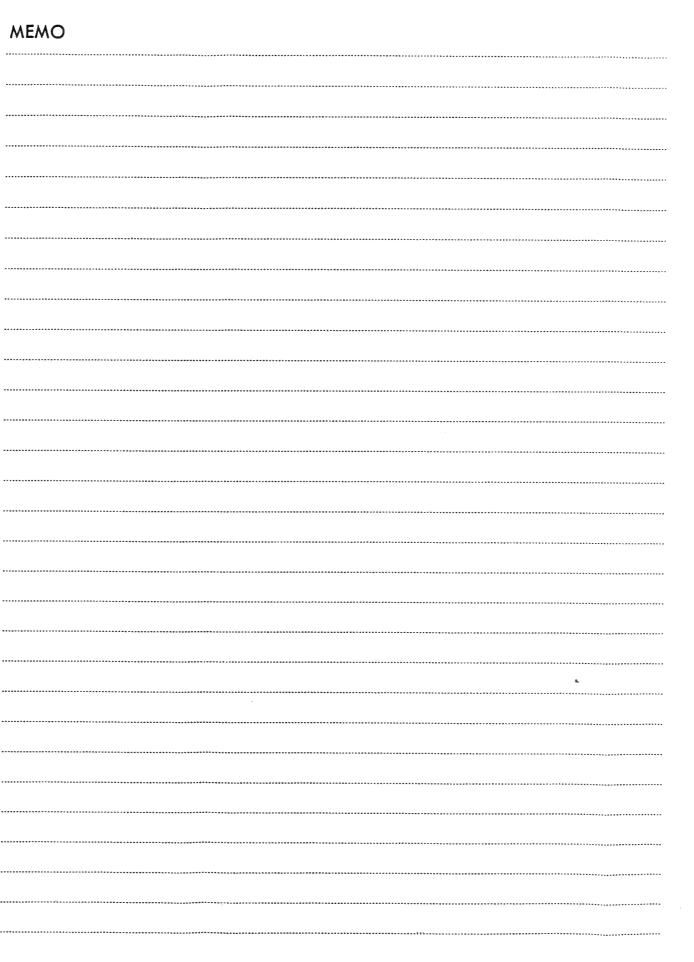




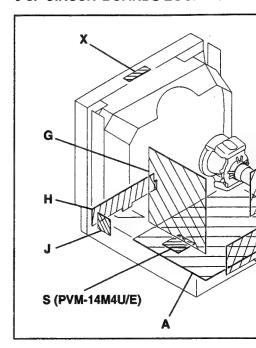
6-2. FRAME SCHEMATIC DIAGRAM







6-3. CIRCUIT BOARDS LOCATION



6-4. PRINTED WIRING BOARDS AND S

Note:

- All capacitors are in µF unless otherwise noted.
 50 WV or less are not indicated except for electrolytics
 Indication of resistance, which does not have one f
- electrical power, is as follows.

Pitch: 5 mm Rating electrical power 1/4 W

- All resistors are in ohms.
- : nonflammable resistor.
- fusible resistor.
- ♠ ∴ internal component.
- panel designation, and adjustment for repair.
 All variable and adjustable resistors have characterist
- B. unless otherwise noted.

 The components identified by in this basic so
- diagram have been carefully factory-selected for eac order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the originally used.

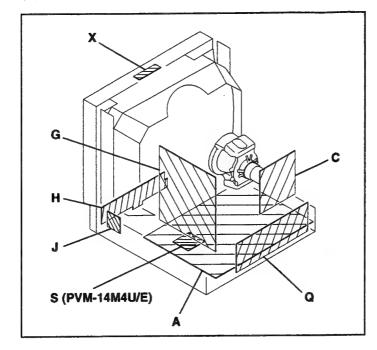
 When replacing components identified by
- necessary adjustments indicated. If results do not me specified value, change the component identified by repeat the adjustment until the specified value is accepted to R1536 adjust on Page 25 and 26.)
- When replacing the part in below table, be sure to performed adjustment.

Part replaced ()	A
C512, C513, C523, C549, C592, D501, D533, IC500, IC507, Q500, Q511, R506, R508, R515, R516, R517, R518, R519, R551, R1537, R1560	(†

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6-3. CIRCUIT BOARDS LOCATION



6-4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics.
- · Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm Rating electrical power 1/4 W

- All resistors are in ohms.
- nonflammable resistor.
- fusible resistor.
- △ : internal component.
 □ : panel designation, and adjustment for repair.
- · All variable and adjustable resistors have characteristic curve
- B, unless otherwise noted. ullet The components identified by $lackbox{H}$ in this basic schematic
- diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- · When replacing components identified by ... make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by 🖪 and repeat the adjustment until the specified value is achieved. (Refer to R1536 adjust on Page 25 and 26.)
- · When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (2)

C512, C513, C523, C549, C592, D501, D533, IC500, IC507, Q500, Q511, R506,

R508, R515, R516, R517, R518, R519,

R551, R1537, R1560----- (A BOARD)

- All voltages are in V.
- Voltage are dc with respect to ground unless otherwise noted.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- : B + bus.
- === : B bus.
- : signal path.
- No mark ; with PAL colour-bar signal sreceived or common voltage.
- For the respective voltage ratings in SECAM, NTSC 3.58, NTSC 4.43 S-VIDEO, and ANALOG RGB modes, see the table

Reference information

scnematic	RESISTOR	: RN	METAL FILM
each set in		: RC	SOLID
		: FPRD	NONFLAMMABLE CARBON
the value		: FUSE	NONFLAMMABLE FUSIBLE
		: RW	NONFLAMMABLE WIREWOUN
make the		: RS	NONFLAMMABLE METAL OXI
t meet the		: RB	NONFLAMMABLE CEMENT
by 🖪 and	COIL	: LF-8L	MICRO INDUCTOR
achiéved.	CAPACITOR	: TA	TANTALUM
		: PS	STYROL
perform the		: PP	POLYPROPYLENE
		: PT	MYLAR
A - 11 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1	53/	: MPS	METALIZED POLYESTER
Adjustment ((3)	: MPP	METALIZED POLYPROPYLENE
		: ALB	BIPOLAR
R1536		: ALT	HIGH TEMPERATURE
(HOLD-DOW	N)	: ALR	HIGH RIPPLE

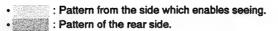
Note: The components identified by shading and mark A are critical for safety. Replace only with part number specified.

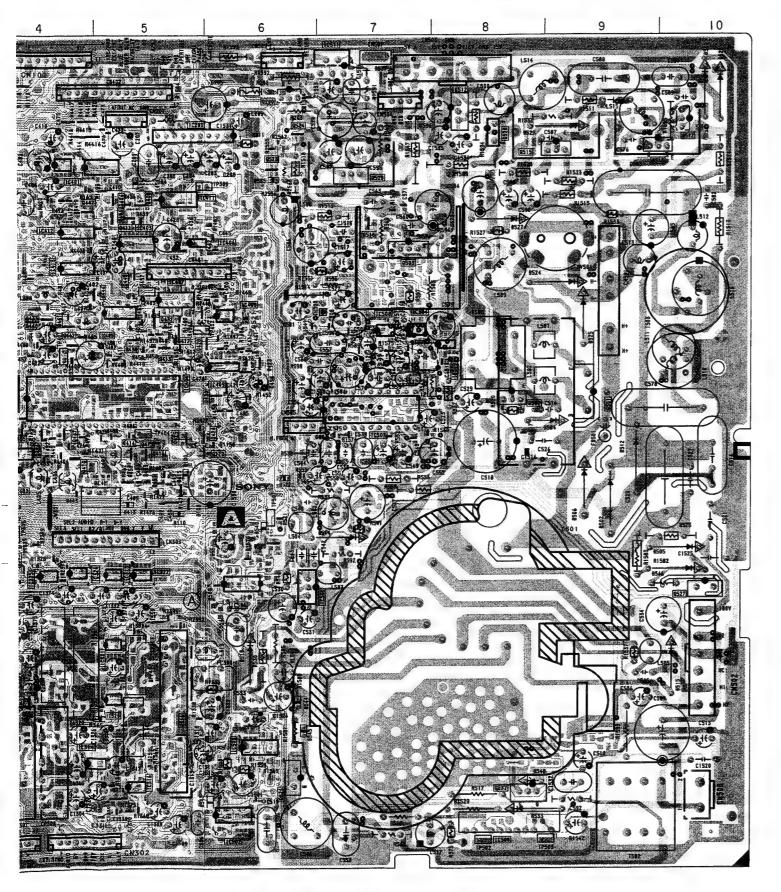
Note: Les composants identifiés par une trame et par une marque A sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

A BOARD (COMPONENT SIDE)

	Q10	08 C-2	OF	527	E-10
IC	Q10	09 A-3	Q	528 532	A-8 G-8
IC102 B IC103 C	-2 Q1 -2 Q20 -1 Q30	00 A-6		DIO	DE
C105 B C106 C C107 C C107 C C C107 C C107 C C C107 C C	-2 -3 -3 -2 -2 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3	374571117734772375221123335567898710987 GGLLEGGLEEGLEEGLEEGLEGGGGGGGGGGGGGGGGG	D1 D1 D1 D1 D1 D1 D1 D3 D3 D3	905 908 908 908 908 908 908 908 908 908 908	511451512227515745157454454544555445555555555
Q102 C- Q103 C- Q104 B-	2 Q520	3 B-6	D54	RIAE	G-8
105 A-	3 Q525	5 A-6		SIST	
			RVS		B-9

	3 4	5	6 7	8	C58
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				550	#-
188 365006900933 0-11 -01831		THE STATE OF THE S			
		企业	The state of the s		
				3-1- J-1- C524	
			11 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-155 (SS C516 C	
		William Wall			2501 C
					<u>Min</u>
				A THINKS	
		是出世歌		BIL	
				10.29	

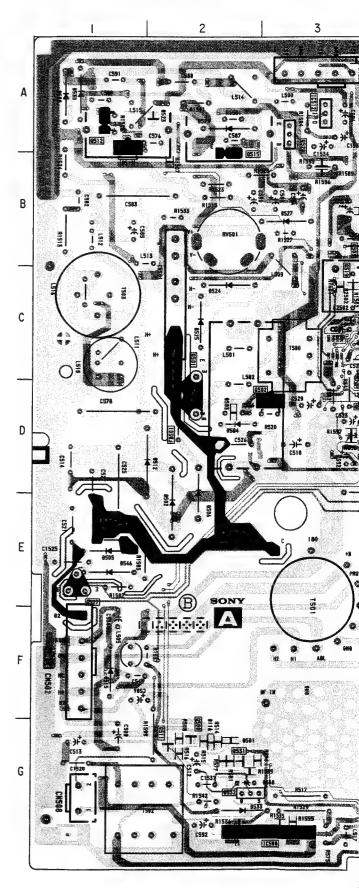




A BOARD (CONDUCTOR SIDE)

Q401 Q402 Q403	Q368 Q369 Q375	Q334 Q336 Q338 Q339 Q345 Q350 Q351 Q352 Q355 Q361 Q363 Q364 Q367	Q333	C505 IC507 IC511 IC512 TRANS Q101 Q111 Q113 Q114 Q200 Q201 Q301 Q302 Q303 Q305 Q306 Q307 Q309 Q310 Q312 Q313 Q315 Q319 Q321 Q321 Q321 Q322 Q323 Q325 Q326 Q327 Q327 Q328 Q329 Q330 Q331 Q329 Q330 Q331 Q329 Q330 Q331 Q329 Q330 Q331 Q328 Q329 Q330 Q331 Q328 Q329 Q330 Q331 Q328 Q329 Q330 Q331 Q328 Q329 Q330 Q331 Q328 Q329 Q330 Q331 Q328 Q329 Q330 Q331 Q328 Q329 Q330 Q331 Q328 Q329 Q330 Q331 Q328 Q329 Q330 Q331 Q328 Q329 Q330 Q331 Q328 Q329 Q330 Q321 Q328 Q329 Q330 Q327 Q328 Q329 Q330 Q327 Q328 Q329 Q330 Q327 Q328 Q329 Q330 Q327 Q328 Q328 Q328 Q328 Q328 Q328 Q328 Q328	IC101 IC108 IC200 IC303 IC404 IC500	IC
B-6 B-6 B-6	E-8 E-8 D-8	91988988858988 10000000000000000000000000000000000	D-9	E-4 D-4 A-3 ISTOR A-9 C-17 A-8 A-5 B-10 B-7 B-8 B-7 B-8 B-10 B-8 B-7 B-8 B-10 B-10 B-10 B-10 B-10 B-10 B-10 B-10	A-9 B-8 A-5 E-9 D-6 G-3	C
D315 D317 D320	D309 D310 D311	DIO D101 D102 D103 D107 D111 D115 D116 D200 D301 D303 D304 D307		Q422 Q423 Q424 Q428 Q431 Q434 Q439 Q444 Q448 Q500 Q501 Q502 Q503 Q505 Q506 Q507 Q508 Q509 Q511 Q512 Q513 Q514 Q515 Q516 Q517 Q519 Q520 Q527 Q528 Q520 Q527 Q528 Q520 Q521 Q521 Q522 Q525 Q526 Q527 Q528 Q529 Q530 Q531 Q532 Q2501	Q409 Q417 Q418 Q419 Q420 Q421	Q405 Q407
E-8 D-9 D-9	G-8 G-8 G-9	B-10 B-9 B-9 B-9 B-9 G-2 A-4 G-8 F-7 G-7 G-8		6556565659227754545454247742454545474756447764224	D-7 C-5 B-5 C-6 C-6 B-5 B-5	C-6 C-7
RV501	VARIA RESIS	D526 D527 D528 D529 D530 D531 D532 D533 D534 D536 D542 D546 D547 D548	D525	D346 D347 D363 D364 D401 D402 D404 D405 D407 D410 D411 D421 D422 D425 D427 D500 D501 D502 D503 D504 D505 D506 D507 D508 D509 D510 D511 D512 D513 D514 D515 D516 D517 D518 D519 D523 D524	D324 D325 D326 D333 D337 D344 D345	D322 D323
B-2	TOR	B-4 B-3 A-1 A-2 A-1 B-4 B-4 B-4 B-5 B-4 E-1 D-4 G-2	C-2		E-9 D-8 E-9 C-9 E-8 D-8 E-7	D-9 C-9

-A BOARD- <Conductor Side>



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NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

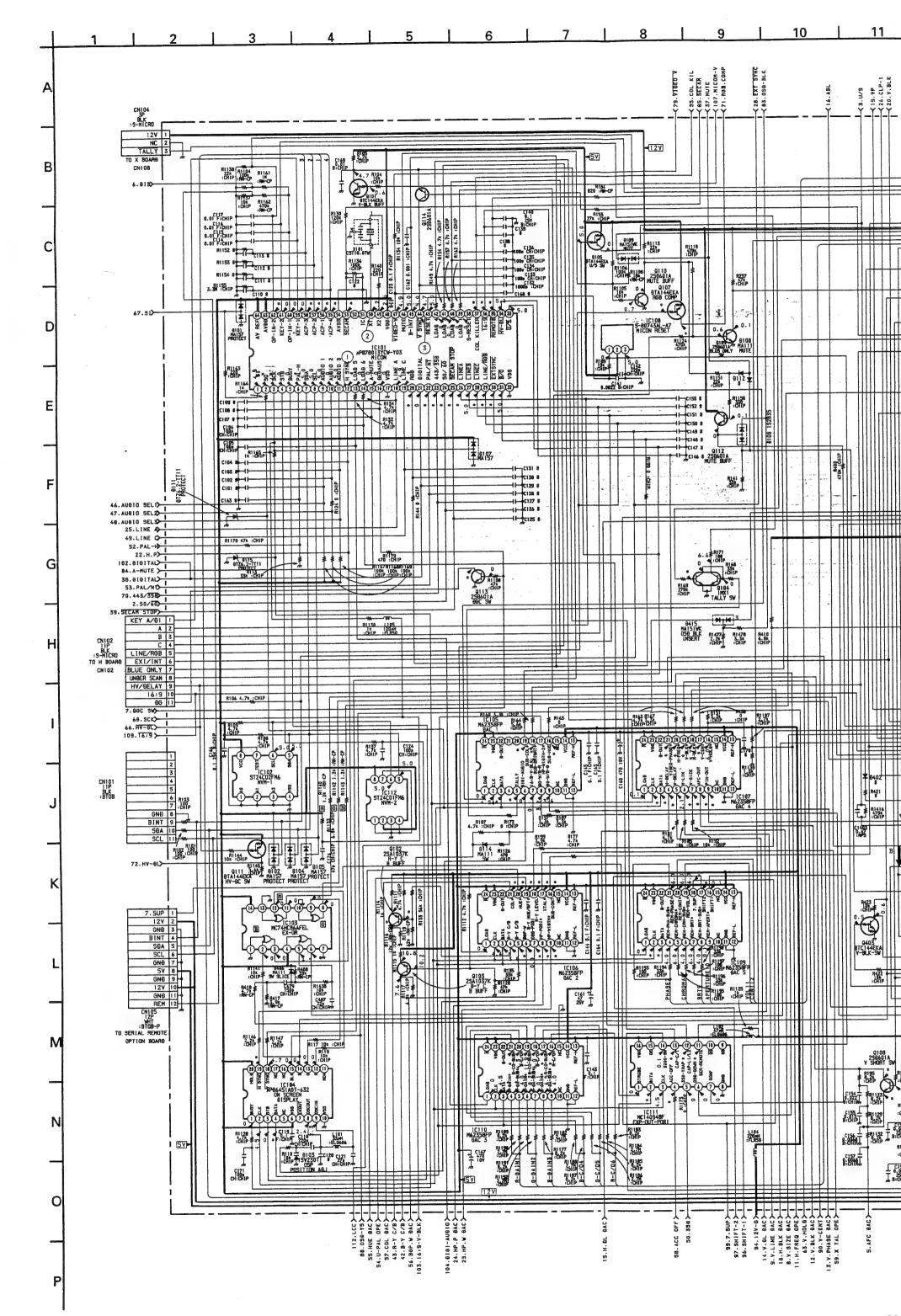
• : Pattern from the side which enables seeing.

A BOARD (CONDUCTOR SIDE)

1	(CONDUCTOR SIDE)							
	IC101 IC108 IC200 IC303	A-9 B-8 A-5 E-9	Q405 Q407 Q409 Q417 Q418 Q419 Q420	C-6 C-7 D-7 C-5 B-5 C-6 C-6	D322 D323 D324 D325 D326 D333 D337	D-9 C-9 E-9 D-8 E-9 C-9 E-8		
	IC404 IC500 IC505 IC507 IC511 IC512	D-6 G-3 E-4 D-4 A-4 A-3	Q421 Q422 Q423 Q424 Q428 Q431 Q434	မှာ မှာ မှ မှ မှ မှ မ ပ ပ ဝ မ ပ	D344 D345 D346 D347 D363 D364 D401	D-8 E-7 E-7 E-7 E-8 E-8 B-7		
	TRANS	ISTOR	Q434 Q439 Q444	ე-6 B-5	D401 D402 D404	B-7 D-6		
	Q101 A-9 Q111 C-10 Q113 A-7 Q114 A-8 Q200 A-5 Q201 A-5 Q301 G-8 Q302 G-10 Q303 G-6 Q305 G-8 Q306 G-7 Q307 G-8 Q309 G-8 Q310 G-7 Q312 G-8 Q315 G-8 Q315 G-8 Q316 G-7 Q315 G-8 Q316 G-7 Q317 G-8 Q318 G-7 Q318 G-7 Q319 F-7 Q321 G-8 Q329 G-9 Q320 G-9 Q320 G-9 Q320 G-9 Q320 G-9 Q330 F-9 Q331 F-9 Q332 G-10	Q448 Q500 Q501 Q502 Q503 Q505 Q506 Q507 Q508 Q509 Q510 Q511 Q512 Q513 Q514 Q515 Q516 Q517 Q519 Q520 Q522 Q525 Q526 Q527 Q528 Q529 Q530 Q531 Q532 Q531	0 9 2 2 3 3 5 4 5 4 5 4 2 1 1 1 4 2 4 4 3 4 5 4 4 1 3 7 3 4 2 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2	D405 D407 D410 D411 D421 D422 D425 D427 D500 D501 D502 D503 D504 D505 D506 D507 D508 D509 D510 D511 D512 D513 D514 D515 D516 D517 D518 D519 D518 D519 D523 D524 D525	#\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
	Q333 Q334 Q336	D-9 F-9 E-10	DIO	DE	D526 D527	B-4 B-3		
4	Q338 Q339 Q345 Q349 Q350 Q351 Q352 Q355 Q361 Q363 Q364 Q367	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	D101 D102 D103 D107 D111 D115 D116 D200 D301 D303 D304 D307	B-10 B-9 B-9 B-9 B-9 B-9 G-2 A-4 G-8 F-7 G-8	D528 D529 D530 D531 D532 D533 D534 D536 D542 D546 D547 D548	A-1 A-2 A-1 B-4 B-2 B-5 B-1 B-1 B-1 B-1 B-1 B-1 B-1 B-1 B-1 B-1		
	Q368 Q369 Q375	E-8 E-8 D-8	D309 D310 D311	G-8 G-8 G-9	VARIA RESIS	ABLE		
	Q401 Q402 Q403	B-6 B-6 B-6	D311 D315 D317 D320	G-9 E-8 D-9 D-9	RV501	B2		

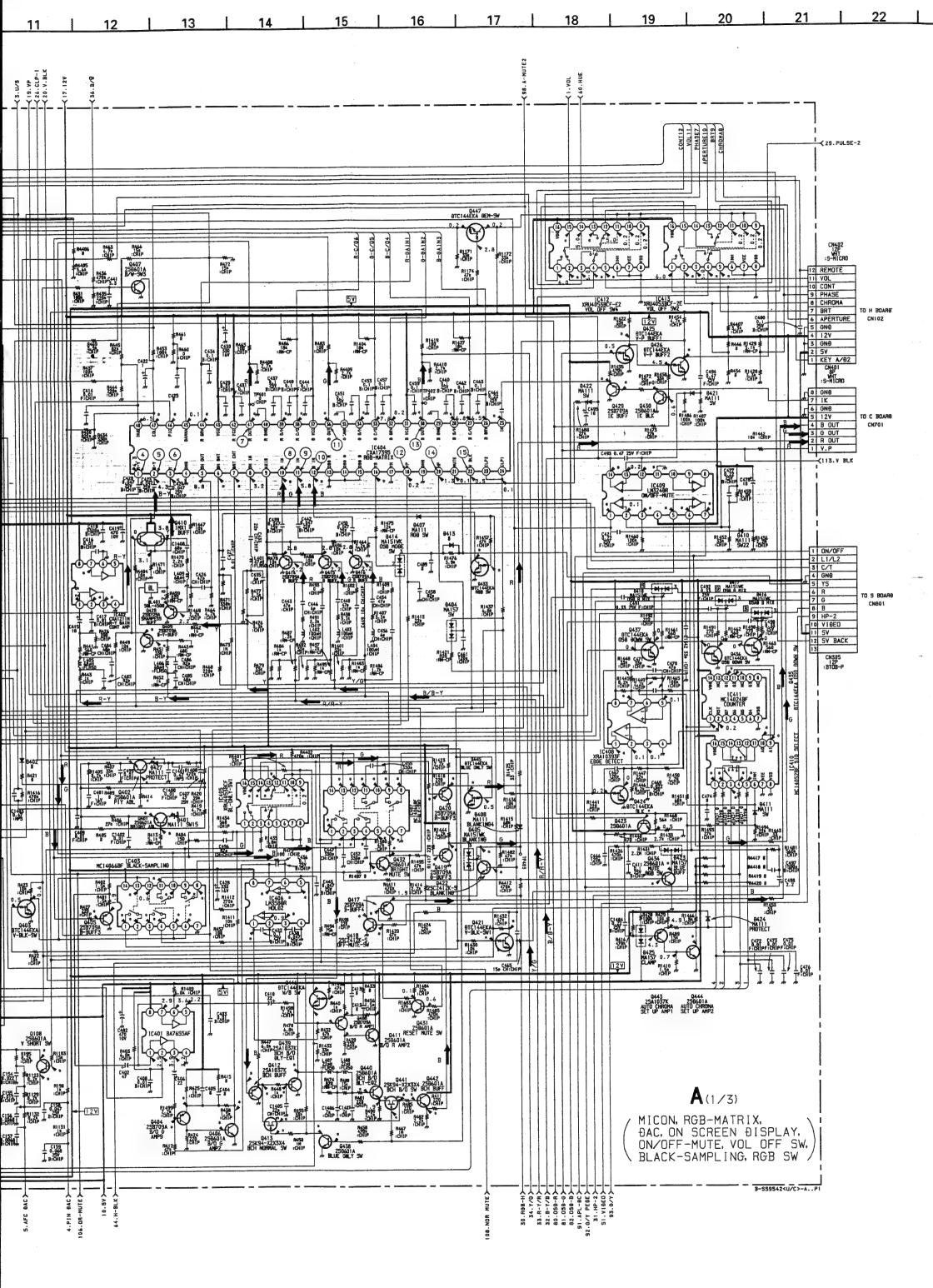
-A BOARD- <Conductor Side>

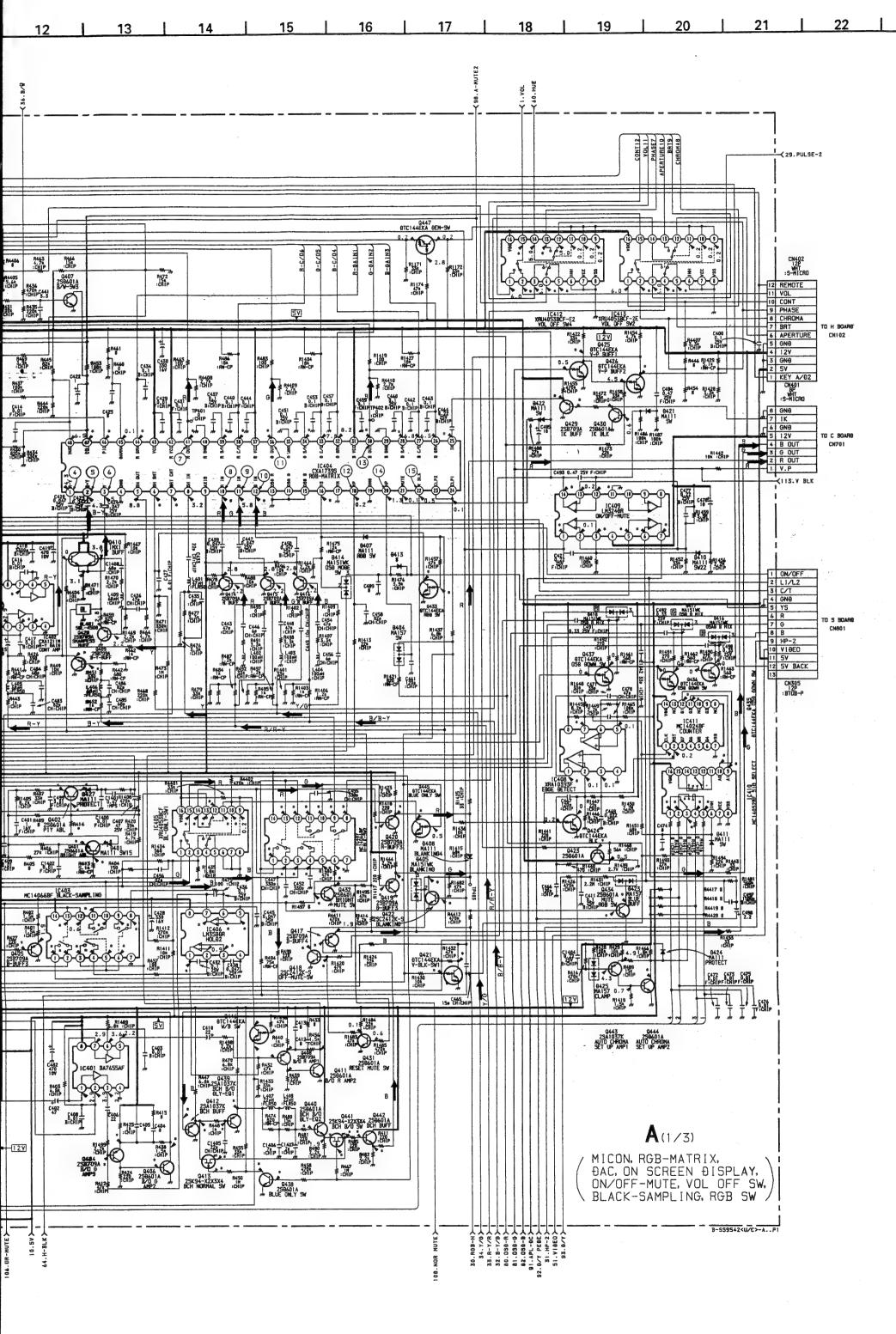
· Pattern of the rear side. B sonx



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A BOARD WAVEFORMS

A BOARD WAVE	ORMS	
(1) 4.3 Vp-p(H)	2 5.6 Vp-p (10MHz)	3 4.8 Vp-p (V)
PAL 0.3 Vp-p (H) SECAM 0.32 Vp-p (H)	AT 1.43 (H) S-V19E0 (O . 35 Vp-p (H)	5 -vyMlvyMlvy 0.45 Vp-p (H) SECAM 0.5 Vp-p (H)
5 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	5 - VI 0 0 0 . 45 Vp - p (H)	6 0.57 Vp-p(H) secam 0.45 Vp-p(H)
(A) (H) (H) (H) (H) (H) (H) (H) (H) (H) (H	7 2.4 Vp-p (H) SECAM 2.3 Vp-p (H)	7 VP-p(H) NTSC4.43 2.2 Vp-p(H)
7 5-V10E0 2.4 Vp-p (H)	7 	(8) AMALOG ROB O . 6 Vp-p (H)
9 ANALOS RGB 0.6 Vp-p (H)	10 ANALOG POB 0.6 Vp-p(H)	PAL 2.6 Vp-p (H) SECAH 2.5 Vp-p (H)
NTSC3.58 2.4 Vp-p (H) NTSC4.43 Vp-p (H)	3-V19E0 2.4 Vp-p (H)	ANALOG RGB 3.0 Vp-p(H)
12 4.6 Vp-p (V)	PAL 1.8 Vp-p (H) SECAM 1.9 Vp-p (H)	NTSC3.58 Vp-p (H) NTSC4.50 1.7 Vp-p (H)
(H) q-qV e-11-e	ANALDO RGB 2. 4 Vp-p (H)	3.7 Vp-p(H)
3.6 Vp-p (V)		

A BOARD (1/3) * MARK LIST

12P : BTOB-P
15 CHIP
10.0(11)
3k : CHIP

A BOARD (1/3) * MARK

ROA	KRD (1	/3) *	MARK			
	PAL	SECAM	NTSC 3.58	NTSC 4.43	S-VIDEO	ANALOG RGB
C101 ②	2.3 4.5	2.4 4.6	2.2 4.5	2.2 4.4	2.0 4.4	2.3 4.5
(6)	4,1	3.4	0	0.1	0	0
12	3.4	3.5 0	3.5 0	3.5 0	3.1 4.8	3.5
Ø	0	0	0	0	0	4.9
Ø	4.9 5.0	5.0 5.0	0	5.0	0	0
3	5.0	5.0	0	0	0	0
Ø Ø	0.1	5.0	0.1	0.1	0 4.9	0.1
(b)	5.0	5.0	5.0	5.0	0	5.0
3	5.0	5.0 5.0	5.0 5.0	5.0 5.0	4.9 5.0	0.1
₩	4.2	4.1	4.6	5.0	3.9	3.9
9	4.0 0.3	4.0	4.6 0.1	5.0 0.7	3.6 0.1	3.7 0.1
3	4.2	0.1	4.3	4.2	4.2	4.3
S	4.0 0.5	3.4 0.9	3.6 1.0	3.7 0.8	3.9	1.9
9	3.0	2.5	2.6	2.3	3.8	2.2
9	3.6 4.0	3.0 4.0	2.9 4.0	3.2 4.0	3.9 2.9	4.0
© C103 ©	0.2	0	0.2	0.2	0	0
C104 (I)	2.3	2.3 3.5	2.2	2.2	2.0	2.3 3.5
C105 (3)	3.5 2.3	2.3	3.5 2.2	3.5 2.2	3.1 0	2.3
9	0 2.6	0.1 2.7	0.1 2.7	0 2.6	11.8	2.6
(9)	5.4	5.4	5.4	5.4	6.6	8.1
C106 (3)	2.3 5.4	2.3 5.4	2.2 5.4	2.2 5.4	2.1	2.3 5.4
0	2.4	2.4	2.4	2.4	0.6	2.4
(b)	7.8 5.1	7.8 5.1	7.8 5.1	7.7 5.1	5.5 4.0	7.8 5.1
06	0.1	10.5	10.5	10.5	10.9	10.5
10	3.1 2.4	3.1 4.6	2.6	3.1	2.7	2.5 3.2
(3)	6.3	6.3	11.9	9.0	10.7	3.7
Ø	3.6 0.8	3.6 1.8	4.8 0.4	3.6 0.3	4.3 2.4	9.5
C107 ②	4.6	4.5	4.5	4.5	4.4	4.5
3	2.3 2.8	2.3 2.8	2.2 2.8	0 2.8	2.1 3.3	0 2.8
(6)	1.5	1.4	1.4	1.4	2.3	1.4
D	2.9	2.9	2.9	2.9 2.6	2.1	2.9 2.6
- (2)	2.9	2.9	2.9	2.9	2.6	2.9
0	2.6 3.2	3.2	2.8 5.4	2.8 5.4	2.8 5.3	2.8 5.4
3	4.5	4.6	5.0	5.0	3.7	5.0
00 C109 (2)	6.3 4.6	6.3 4.5	6.1 4.5	6.1 4.5	6.0 4.4	6.1 4.4
3	2.3	2.3	2.2	2.2	2.1	2.3
<u> </u>	11.9	11.9	0.1	11.9	0.1	0.1
C110 (3)	2.3	2.4	2.2	2.2	2.0	2.2
④	7.2 5.8	7.2 5.8	7.2 5.8	7.2 5.8	8.3 6.2	7.2 5.8
· ®	11.9	11.9	11.9	11.9	7.8	11.9
· · · · · · · · · · · · · · · · · · ·	3.7	7.9	7.9	7.9	7.8 3.5	7.9 3.6
C111 @	0.3	0.3	0.3	0.3	0	0.3
<u> </u>	0.2	5.0	5.0	5.0	0.1	5.0
0	5.0	5.0	5.0	5.0	0	5.0
IC402 ②	3.1	2.3	2.9	3.0	3.0	3.6 2.2
0	2.9	2.9	2.9	0	2.9	2.9
IC403 ①	1.2	1.2	0.8	0.8	0.8	0.9
3	1.4	1.3	0.9	0.9	1.3	0
<u>(4)</u>	0.8	0.8	0.9	0.9	0.8	0.6
6	0.5	0.6	0.6	0.6	0.6	0.6
<u> </u>	1.6	1.0	1.0	1.0	0.8	1.1
10	1.4	1.4	1.0	1.0	1.2	1.5
0	0.9	0.6	0.6	0.6	0.8	0.6
C404 (6)	3.0	3.0	3.0	3.0	4.5	0
	4.9 5.6	4.9 5.6	4.9 5.6	4.9 5.6	4.7 5.6	6.1 5.8
0	5.6	5.6	5.6	5.6	5.6	5.8
(b)	3.8	0.1 4.0	4,1	4.2	4.0	4.4 3.6
Ø	7,1	6.6	8.0	8.0	7.7	7.9
39	7.0	7.3	8.1	7.8	1.2 7.8	7.8
S	1.4	1.3	1.2	1,1	1.2	1.5
39	7.8 6.9	7.8	7.7	7.8	8.0 7.6	7. 7 7. 6
•	1.2	1.2	1.0	1.0	1.2	1.3
<u> </u>	7.2	7.2	7.2	7.2	8.3 6.9	7.2
0	6.6	6.6	6.6	6.6	5.5	0
IC405 ① ②	1.6	1.5	0.9	1.3	1.4	1.6
3	1.2	1.2	0.9	0	1,1	1.2
4	1.4	1.3	1.0	0	1.2	1,4
0	0.5	0.5	0.6	1.0	0.3	0.2
	0.5	1.2	0.6	1.3	0.3	0.2 1.3
0	1,4	1.3	0.9	1.3	1.3	1.4
19	1.2	1.2	1.0	1.3	1.2	1.3
IC406 ①	4.8	5.1	4.8	4.8	4.8	5.1
3	1.0	0.9	1.0	1.0	0.8	1.0
6	1.0	1.0	1,1	1.1	0.8	1,1
① IC407 ①	5.1	5.1	4.9 0.9	4.9 1.2	4.9 1.2	5.1 1.3
②	0.4	- 0.1	0.5	0.3	0.4	0.5
③ ④	0.6	1.3	0.7	0.5	1.2	1.4
(3)	2.0	1.8	2.0	2.0	0.5 2.0	2.0
6	11.7	10.7	11.6	11.3	11.7	11.2
(8)	5.5	5.5 5.5	5.5 5.5	5.5 5.5	5.4 5.4	8.5
9	1.4	1.4	1.0	1.3	1.2	1.5
9		-01	0.7	2.0	2.0	0.6 2.0
9	0.6	1.7	2.0		2.0	
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	0.6 2.0 2.0	1.7	2.0	2.0	2.0	2.0
(1) (1) (1) (2) (3)	0.6 2.0	1.7		2.0 3.1 4.1		
(0) (0) (0) (0) (0) (1C408 (1) (7) (1C409 (1)	0.6 2.0 2.0 3.1 4.1	1.7 1.7 2.9 3.8 0.8	2.0 2.9 3.9 9.0	2.0 3.1 4.1 9.4	2.0 3.7 4.2 0	2.0 3.4 4.1 7.5
(9) (0) (0) (1) (1) (1) (1) (2) (3) (4) (4) (5) (7)	0.6 2.0 2.0 3.1 4.1	1.7 1.7 2.9 3.8	2.0 2.9 3.9	2.0 3.1 4.1	2.0 3.7 4.2	2.0 3.4 4.1
(9) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0	0.6 2.0 2.0 3.1 4.1 0 0 5.9 5.9	1.7 1.7 2.9 3.8 0.8 0.6 5.9 5.9	2.0 2.9 3.9 9.0 0.4 6.3 6.3	2.0 3.1 4.1 9.4 0.3 0 6.0	2.0 3.7 4.2 0 0.3 5.9 5.9	2.0 3.4 4.1 7.5 1.6 5.9 5.9
(9) (9) (0) (0) (1) (1) (1) (1) (2) (1) (2) (3) (3) (5)	0.6 2.0 2.0 3.1 4.1 0 0 5.9	1.7 1.7 2.9 3.8 8.8 0.6 5.9	2.0 2.9 3.9 9.0 0.4 6.3	2.0 3.1 4.1 9.4 0.3	2.0 3.7 4.2 0 0.3 5.9	2.0 3.4 4.1 7.5 1.6 5.9

				,		
	PAL	SECAM	NTSC 3.58	NTSC 4.43	S-VIDEO	ANALOG RGB
IC410 ①	3.8	4.0	4.0	4.0	0	3.9
②	3.0	3.1	2.4	3.1	0	4.0
3	1.3	0.7	1.4	1.6	2.3	1.5
(5)	3.5 0.6	3.6 1.3	3.0	3.8	3.9	3.9
6	4.0	4.0	4.0	3.9	0	0
•	0	2.0	1.9	1.8	2.5	1.4
0	2.0	2.3	2.3	2.0	1.8	3.0
(C411 ①	4.1 1.8	2.0	3.9	1.8	4.2 2.5	1.3
0	2.0	2.3	2.3	2.1	1.8	3.0
IC412 ②	0.4	0.5	0.4	0.4	5.9	0.6
•	8.9	8.9	8.9	8.9	8.9	8.3
(5) (3)	9.0 6.0	8,9 6.0	9.0	8.9 6.0	8.9 6.0	8.3
6	0.4	0.5	0.4	0.4	5.9	0.5
IC413 ②	7.9	8.0	8.0	8.0	0	6.9
•	0	5.5	5.5	5.5	5.4	0
<u> </u>	5.5	5.5	5.5	5.5	5.4	8.6
0	3.1	3.1	3.1	3.1	6.0	5.1 5.1
(3)	7.9	7.9	8.0	7.9	6.3	6.9
Q102 B	10.9	10.9	10.9	10.9	10.7	10.9
С	8.1	8.1	8.1	8.1	0	8.1
E	11.5	11.5	11.5	11.5	11.3	11.5
Q104-1 B	- 0.2 5.0	5.0	- 0.2 5.0	5.0	5.0	- 0.2 0.1
C C	0	0	0	0	0	5.0
Q108 C	2.6	2.6	2.6	2.6	2.9	2.6
E	2.6	2.6	2.6	2.6	2.9	2.6
Q111 B	5.0 0.4	5.0 0.4	0	0	0.4	4.9
Q113 C	4.1	4.3	4.2	4.2	3.8	4.0
Q401 B	1.1	0.8	1.5	1.6	1.2	1.0
С	7.5	5.5	6.0	5.2	8.4	10.0
Q402 B	0.5	1.6 0.5	3.2	3.4	3.1 2.4	0.5
C402 B	9.5	7.7	0.5 8.1	0.5 7.4	10.4	6.9
E	1.4	1.6	3.2	3.3	3.2	1.0
Q404 B	5.3	4.1	4.9	5.2	5.3	5.2
E .	6.1	6.3	6.0	6.1	6.1	6.2
Q405 B	0.7	0.7	0	0.7	0.7	0.7
C	1.6	1.5	1.0	1.5	1.4	1.6
Q407 B	0	0	0	0	0	0.6
C	6.6	6.6	6.6	6.6	5.4	0
Q408 B E	5.3 6.0	6.2	4.9 5.9	5.0 6.1	5.2 6.0	5.2 6.1
Q409 B	1.9	1.6	1.6	1.6	1.7	1.6
Ε	2.0	2.2	2.2	2.2	2.3	2.2
Q411 C	1.4	1.4	0.9	1.3	1.3	1,4
Q412 B	1.3	1.3	1.0	1.3	1.1	2.0
Q413 G	2.0	1.9 - 15.1	1.7	1.9 - 2.2	1.8	- 2.1
D	2.0	1.9	- 4.3	0	2.2	2.0
\$	2.0	1.9	1.7	1.9	1.8	2.0
Q417 B	1.4	1.4	1.2	1.2	1.2	2.0
Q418 C	2.1	2.1	1.7	1.7	1.7	1.5
£	2.0	1.9	1.7	1.7	1.8	2.0
Q420 B	1.2	1.2	1.0	1.0	1.2	1.3
E 0422 C	1.8	1.8	1.6	1.6	1.8	1.9
Q422 C Q423 B	2.1 0.5	0.3	0.4	1.7 0.4	0.4	0.2
Q425 C	4.5	4.5	4.5	4.5	4.7	4.5
Q426 C	0.8	0.8	0.7	0.7	0.7	0
Q429 B	0.1	0.8	0.4	0.4	0.1	0.1
0433 B	0	- 2.3	- 1.2	- 1.2	0.4	0.4
Q432 B	- 0.3 11.9	- 3.8 11.6	- 3.4 11.8	- 2.7 11.8	- 0.1 12.0	- 3.9 11.6
Q433 B	0	-0.1	0	0	0	2.7
C	3.0	3.0	3.0	3.0	4.5	0
Q434 B	- 0.1	0	0	0	- 0.1	0.4
Q438 B	- 0.4	4.7	4.5 - 3.1	4.8 - 2.4	2.9	- 2.4
C C	11.7	11.4	11.7	11.7	11.6	11.7
Q439 B	2.0	1.9	1.8	1.7	1.8	2.0
E	2.6	2.5	2.4	2.4	0	2.6
Q440 B	2.6	2.5	2.5	2.5	2.4	2.7
Q441 G	~ 1.1 2.0	- 13.0 1.9	7.7 - 8.1	- 4.8 1.9	1.8	- 0.7 2.0
S	2.0	1.9	1.6	1.9	1.8	2.0
Q442 B	1.3	1.3	1.1	1.1	1.1	2.1
E	0.9	0.9	0.7	0.7	0.7	1.5
Q444 C	1.2	1.1	1.2	1.4	2.2	1.3
Q445 C	0.4	1.2	1.4	1.3	0.3	0.4

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A BOARD (2/3) * MARK

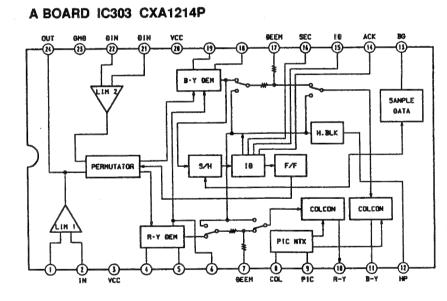
PAL SECAM 3.58 4.43 SVICEO RGB	A DU	AND (43) +	MWDL	•		
② 2.0 0 1.8 1.7 1.7 3.5 C302 ① 2.9 2.9 2.9 0.3 2.9 2.2		PAL	SECAM		NTSC 4.43	S-VIDEO	ANALOG RGB
C302 ○ 2.9 2.9 2.9 0.3 2.9 2.9 ⑤ 5.3 5.1 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 0.0 0	IC301 ①	2.8	0	2.8	3.0	3.0	2.3
C302 ① 2.9 2.9 2.9 0.3 2.9 2.9 2.9 2.9 2.9 2.9 2.9 2.9 2.9 2.9 3.9 2.9 3.9 3.9 2.8 3.1 3.1 3.3 3.9 2.8 3.1 3.1 3.3 3.9 2.8 3.1 3.1 3.3 3.9 2.2 2.6 2.2 <td< td=""><td>2</td><td>2.0</td><td>0</td><td>1.8</td><td>1.7</td><td>1.7</td><td>3.5</td></td<>	2	2.0	0	1.8	1.7	1.7	3.5
⑤ 5.3 5.1 4.5 4.5 4.5 4.5 4.5 0.0 0		2.9	2.9	2.9	0.3	2.9	2.9
OD 10.5 8.4 O O O O CO O CO O		5.3	5.1	4.5	4.5	4.5	4.5
C303 ∅ 2.3 2.6 2.2 2.2 2.6 2.8 ∅ 0.1 4.2 0.6 0.6 0.6 0.1 ∅ 3.9 2.8 3.1 3.1 3.3 3.9 0 9.4 0.1 9.4 9.4 9.4 9.4 ∅ 7.3 7.3 2.5 2.5 2.6 2.5 0 7.3 7.3 2.5 2.5 2.6 2.6 2.5 0 7.3 7.3 2.5 2.6 2.6 2.5 2.2 <td></td> <td></td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>				0	0	0	0
⊕ 0.1 4.2 0.6 0.6 0.6 0.1 ⊕ 3.9 2.8 3.1 3.1 3.3 3.9 G304							2.8
(39) 3.9 2.8 3.1 3.1 3.3 3.3 3.9 (30) 4 2.2 2.6 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2							
C304 ∅ 2.2 2.6 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.5 0.9 7.3 7.3 2.5 2.6 2.6 2.5 2.5 2.5 2.2							
③ 9.4 0.1 9.4 9.4 9.4 9.4 ⑥ 7.3 7.3 2.5 2.5 2.6 2.5 ⑥ 1.9 1.9 2.2							
● 7.3 7.3 2.5 2.5 2.6 2.5 ● 1.9 1.9 1.9 2.2 2.2 2.2 2.2 2.2 2.2 ● 2.5 2.5 2.5 2.2 2.2 2.2 2.3 2.2 ● 2.5 2.5 2.5 2.2 2.2 2.2 2.3 2.2 ● 2.5 1.1 2.5 2.4 2.4 1.3 ● 0 4.1 4.1 4.1 4.1 4.1 4.2 4.5 ● 0 0.4 0.2 0 0 0 0 0 0.1 ● 2.6 2.6 2.5 2.4 2.4 2.5 2.7 ● 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
⊕ 7.3 7.3 2.5 2.6 2.6 2.5 ⊕ 1.9 1.9 2.2							
⊕ 1.9 1.9 2.2							
★ 2.5 2.5 2.2 2.2 2.3 2.2 € 2.5 1.1 2.5 2.4 2.4 1.4 1.3 2.5 2.4 2.4 1.4 1.3 2.5 2.4 2.4 1.4 1.5 2.4 2.4 1.4 4.5 4.7 4.5							
C305 ① 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 3.9 3.9 3.1 3.3 3.1 4.1 4.1 4.1 4.2 4.5 3.0							
⊕ 2.5 1.1 2.5 2.4 2.4 1.3 ⊕ 4.1 4.1 4.1 4.1 4.2 4.5 ⊕ 0.4 0.2 0 0 0 0.1 ⊕ 2.6 2.6 2.5 2.4 2.5 2.7 ⊕ 0 0 0.8 0.8 0.9 0.9 ⊕ 0 0 0.8 0.8 0.9 0.9 (C306) 8.1 8.1 8.1 8.1 0.0 (C309) 3.6 0 3.6 3.5 9.5 9.9 (C310) 0 6.2 6.2 6							
① 4.1 4.1 4.1 4.2 4.5 ② 0.4 0.2 0 0 0 0.1 ③ 2.6 2.6 2.5 2.4 2.5 2.7 ③ 0 0 0.8 0.8 0.9 0.9 ③ 2.1 2.7 1.9 1.9 1.9 2.7 C306 0 3.1 8.1 8.1 8.1 8.1 0.0 C309 0 0 0 0.1 1.4 4.4 C309 3.6 0 3.6 3.6 3.6 3.6 3.6 C310 0 6.2 6.2 6.2 6.2 6.2 5.9 3.0 5.9 5.9 6.0 6.3 5.9 5.9 3.0 5.9 5.9 6.0 6.3 5.9 5.9 4.0 6.2 6.2 6.2 6.2 6.2 5.9 4.0							
⊕ 0.4 0.2 0 0 0.1 ⊕ 2.6 2.6 2.5 2.4 2.5 2.7 ⊕ 0 0 0.8 0.8 0.9 0.9 ⊕ 2.1 2.7 1.9 1.9 1.9 2.7 C306 ⊕ 8.1 8.1 8.1 8.1 8.1 9.1 9.2 7.7 C306 ⊕ 8.1 8.1 8.1 8.1 8.1 9.1 9.2 7.7 C309 ⊕ 3.6 0 3.6 3.2 5.9 5.9 5.9 5.9 5.9 5.9 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
⊕ 2.6 2.6 2.5 2.4 2.5 2.7 ⊕ 0 0 0.8 0.8 0.9 0.9 0.9 ⊕ 2.1 2.7 1.9 1.9 1.9 1.9 2.7 C306 ⊕ 8.1 8.1 8.1 8.1 0.0 0.0 0.0 0.1 4.4 4.4 C309 ② 3.6 0 3.6 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
③ 0 0 0.8 0.8 0.9 0.9 ⑤ 2.1 2.7 1.9 1.9 1.9 2.7 C306 ① 8.1 8.1 8.1 8.1 0.1 0.1 4.4 C309 ② 3.6 0 3.6 3.6 3.6 3.5 3.6 © 0 0 0 0 0 0 4.4 C310 ① 6.2 6.2 6.2 6.2 6.2 5.9 ⑥ 6.3 6.3 6.2 6.2 5.9 5.9 Ø 5.9 5.9 6.0 6.3 5.9 5.9 Ø 6.2 6.2 6.2 6.2 6.2 5.9 Ø 6.2 6.2 6.2 6.2 5.9 5.9 Ø 5.9 5.9 5.9 6.2 5.8 5.9 Ø 6.2 6.2 6.2 6.2 5.9 6.2 5.8						_	
⊕ 2.1 2.7 1.9 1.9 1.9 2.7 C306 ⊕ 8.1 8.1 8.1 8.1 8.1 9.1 0 ⊕ <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
C306 ① 8.1 8.1 8.1 8.1 9.1 0 ② ① ② ① 0.1 0.1 4.4 C309 ② 3.6 Ø 3.6 3.6 3.6 3.6 ④ ① O O O O O 4.4 C310 ① 6.2 6.2 6.2 6.2 6.2 5.9 ④ 6.3 6.3 6.2 6.2 6.2 6.2 5.9 ④ 5.9 5.9 6.0 6.3 5.9 5.9 € 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 5.9 ④ 6.2 6.3 6.3 6.2 6.2 5.9 6.2 5.8 5.9 ④ 6.2 6.2 6.2 6.2 5.8 5.9 ④ 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4							
② ○		~					
C309 Q 3.6							
⑥ 0 0 0 0 4.4 IC310 ∅ 6.2 6.2 6.2 6.2 6.2 5.9 ⑥ 6.3 6.3 6.2 6.2 6.2 5.9 ⑥ 5.9 5.9 6.0 6.3 5.9 5.9 Ø 5.9 5.9 6.0 6.3 5.9 5.9 Ø 6.2 6.2 6.2 6.2 6.2 5.9 Ø 6.2 6.3 6.3 6.2 6.2 5.9 Ø 5.9 5.9 5.9 6.2 5.8 5.9 Ø 0.4 0.4 0.4 0.4 0.4 0.5 0.7 IC312 Φ 3.6 0 3.6 3.6 3.6 3.6 3.6 3.6 Ø 0 0 0 0 12.0 0.1 4.5 IC313 Φ 0 6.3 0 6.3 3.6 3.6 3.6							
C310 C3 C3 C3 C3 C3 C3 C3 C	IC309 ②	3.6	0	3.6	3.6	3.6	3.6
③ 6.3 6.3 6.2 6.2 5.9 ⑤ 5.9 5.9 6.0 6.3 5.9 5.9 IC311 ① 0 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 5.9 6.2 6.2 5.9 6.0 6.3 6.3 6.2 6.2 5.9 6.0 6.3 6.3 6.2 6.2 5.9 6.0 6.3 6.3 6.2 6.2 5.9 6.0 6.3 6.3 6.2 6.2 5.9 6.0 6.3 6.3 6.2 5.9 6.0 6.2 5.8 5.9 6.0	•	0	0	0	0	0	4.4
\$\begin{array}{c c c c c c c c c c c c c c c c c c c	IC310 ①	6.2	6.2	6.2	6.2	6.2	
C311	3	6.3	6.3	6.2	6.2	6.2	5.9
② 6.2 6.2 6.2 6.2 6.2 5.9 ④ 6.2 6.3 6.3 6.2 6.2 5.9 ⑥ 3.3 3.3 2.9 2.9 2.9 0 ⑥ 5.9 5.9 5.9 6.2 5.8 5.9 ⑥ 0.4 0.4 0.4 0.4 0.5 0.7 IC312 ② 3.6 0 3.6 3.6 3.6 3.6 3.6 Ø 0 0 0 12.0 0.1 4.5 IC313 ① 0 6.3 3.6 3.6 3.6 3.6 IC314 ② 0 3.0 7.6 0 3.0 0 IC315 ① 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 Ø 0.6 0 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0	0	5.9	5.9	6.0	6.3	5.9	5.9
⊕ 6.2 6.3 6.3 6.2 6.2 5.9 ⊕ 3.3 3.3 2.9 2.9 2.9 0 ⊕ 5.9 5.9 5.9 6.2 5.8 5.9 ⊕ 0.4 0.4 0.4 0.4 0.4 0.5 0.7 (C312 ♥ 3.6 0 3.6 3.6 3.6 3.6 3.6 ⊕ 0 0 0 0 12.0 0.1 4.5 ⊕ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C311 ①	0	6.2	6.2	6.2	6.2	6.2
⑥ 3.3 3.3 2.9 2.9 2.9 0 ⑥ 5.9 5.9 5.9 6.2 5.8 5.9 ⑥ 0.4 0.4 0.4 0.4 0.5 0.7 IC312 ② 3.6 0 3.8 3.6 3.6 3.6 ④ 0 0 0 12.0 0.1 4.5 IC313 ③ 0 6.3 0 6.3 6.3 6.3 C314 ② 0 3.0 7.6 0 3.0 0 C315 ① 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.6	2	6.2	6.2	6.2	6.2	6.2	5.9
⊕ 5.9 5.9 5.9 6.2 5.8 5.9 ⊕ 0.4 0.4 0.4 0.4 0.4 0.5 0.7 IC312 ② 3.6 0 3.6 3.6 3.6 3.6 3.6 ⊕ 0 0 0 12.0 0.1 4.5 IC313 ① 0 6.3 0.3 6.3 6.3 6.3 ⊕ 0 0 0 0 0.29 0.1 IC314 ② 0 3.0 7.6 0 3.0 0 ⊕ 0 0 0 0 2.9 0.1 IC315 ① 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.6 ⊕ 9.4 9.3 9.3 9.2 9.3 9.4 ⊕ 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	(6.2	6.3	6.3	6.2	6.2	5.9
(\$\begin{array}{c c c c c c c c c c c c c c c c c c c	6	3.3	3.3	2.9	2.9	2.9	0
(\$\begin{array}{c c c c c c c c c c c c c c c c c c c	10	5.9	5.9	5.9	6.2	5.8	5.9
C312 Q 3.6							
C313 O		3.6					3.6
C314 Q	(1)	0	0	0	12.0	0.1	4.5
C314 Q	IC313 ①	0	6.3	0	6.3	6.3	6.3
⊕ 0 0 0 2.9 0.1 IC315 ⊕ 0.4 0.4 0.4 0.4 0.4 0.4 0.6 0.0 0.0 0.2 0.2 2.5 2.5 2.5 2.5 7.2 0.0							
C315 O							
 ♠ 0.6 ♠ 9.4 ♠ 9.3 ♠ 9.3 ♠ 9.2 ♠ 9.3 ♠ 9.4 ♠ 9.3 ♠ 9.4 ♠ 9.4 ♠ 0.4 ♠ 0.6 <li< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></li<>							
⑤ 9.4 9.3 9.3 9.2 9.3 9.4 ① 2.5 2.5 2.5 2.5 2.5 7.2 ④ 0.4 0.4 0.4 0.4 0.4 0.4 0.6 ⑤ 0.4 0.4 0.4 0.4 0.4 0.6 0.6 ⑥ 0.4 0.4 0.4 0.4 0.4 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 12.0							_
⊕ 2.5 2.5 2.5 2.5 7.2 ⊕ 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.1 0.0 12.0							
(B) 0.4 0.4 0.4 0.4 0.4 0.6 (B) 0.4 0.4 0.4 0.4 0.4 0.6 (C317 (G) 2.0 0 2.6 2.1 2.0 12.0 (E) 12.0 0 12.0 12.0 12.0 12.0 (D) 10.7 10.6 10.6 10.6 10.5 10.7 (D) 9.4 9.4 9.4 9.4 9.1 9.4 (C318 (G) 11.5 11.5 0 11.4 11.4 11.4 11.4 (C320 (G) 6.3 6.3 6.3 6.3 6.3 6.3 0 (C321 (D) 0 0 0 0 3.3 0 (C321 (D) 0 0 0 0 3.3 0 (C322 (D) 5.8 5.9 6.0 6.3 5.9 5.9 (C322 (D) 5.8 5.9 6.0 6.3 5.9							
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C317 @ 2.0							
⊕ 12.0 0 12.0 12.0 12.0 12.0 ⊕ 10.7 10.6 10.6 10.6 10.5 10.7 ⊕ 9.4 9.4 9.4 9.4 9.1 9.4 IC318 ⊕ 11.5 11.5 0 11.4 11.4 11.4 IC320 ⊕ 6.3 6.3 6.3 6.3 6.3 0 ⊕ 3.0 0 0 3.1 0 0 ⊕ 0 0 0 3.3 0 (C321 ⊕ 0 0 0 3.3 0 (C322 ⊕ 5.8 5.9 6.0 6.3 5.9 5.9 (C323 ⊕ 5.8 5.9 6.0 6.3 5.9 5.9 (C323 ⊕ 6.2 6.2 6.2 6.2 6.2 5.6 5.6 (C324 ⊕ 6.2 6.2 6.2 6.2 5.9 5.9 6.2 5.8 5.9 <							
⑤ 10.7 10.6 10.6 10.6 10.5 10.7 ⑥ 9.4 9.4 9.4 9.4 9.1 9.4 IC318 ⑤ 11.5 11.5 0 11.4 11.4 11.4 IC320 ① 6.3 6.3 6.3 6.3 6.3 6.3 ⑥ 3.0 0 0 3.1 0 0 ⑥ 0 0 0 3.3 0 Ø 0 0 0 0 0 1.7 2.7 Ø 5.8 5.9 6.0 6.3 5.9 5.9 5.9 Ø 5.2 6.2 6.2							
(Q) 9.4 9.4 9.4 9.4 9.1 9.4 IC318 (5) 11.5 11.5 0 11.4 </td <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>					-		
C318 C318 C318 C318 C318 C320 C320							
② 3.0 0 0 3.1 0 0 ④ 0 0 0 0 3.3 0 IC321 ② 0 0.1 0.1 0 2.9 0 ⑥ 0 0 0 0 0.1 2.7 IC322 ⑤ 5.8 5.9 6.0 6.3 5.9 5.9 IC323 ⑤ 6.2 6.2 6.2 6.2 6.2 5.9 Ø 0 0 5.6 5.6 5.6 5.6 5.6 5.6 IC324 ⑥ 6.2 6.2 6.2 6.2 6.2 6.2 5.9 IC326 ⑥ 5.9 5.9 6.0 6.3 5.9 5.9 ⑥ 5.9 5.9 6.2 5.8 5.9 ⑥ 5.9 5.9 6.2 5.8 5.9 ⑤ 1.7 1.9 1.6 1.6 2.1 2.1 ⑥ 2.4 1.0 2.3 2.3 2.3 4.8 ⑦ 0 -0.1 <							
④ 0 0 0 3.3 0 IC321 ② 0 0.1 0.1 0 2.9 0 ⑥ 0 0 0 0 0 0.1 2.7 IC322 ⑤ 5.8 5.9 6.0 6.3 5.9 5.9 IC323 ⑤ 6.2 6.2 6.2 6.2 6.2 6.2 5.6 IC324 ⑤ 6.2 6.2 6.2 6.2 6.2 5.9 IC326 ① 5.9 5.9 6.0 6.3 5.9 5.9 IC326 ① 5.9 5.9 6.0 6.3 5.9 5.9 IC326 ① 5.9 5.9 5.9 6.2 5.8 5.9 <							
C321 ② O O,1 O,1 O C,9 O							
⊕ 0 0 0 0.1 2.7 IC322 ⊕ 5.8 5.9 6.0 6.3 5.9 5.9 IC323 ⊕ 6.2 6.3 6.2 6.2 6.2 5.9 ① 0 5.6 5.6 5.6 5.6 5.6 IC324 ⊕ 6.2 6.2 6.2 6.2 6.2 5.9 IC326 ⊕ 5.9 5.9 6.0 6.3 5.9 5.9 ⊕ 5.9 5.9 5.9 6.2 5.8 5.9 ⊕ 5.9 5.9 5.9 6.2 5.8 5.9 ⊕ 1.7 1.9 1.6 1.6 2.1 2.1 2.1 ⊕ 2.4 1.0 2.3 2.3 2.3 2.3 4.6 ⊕ 0 -0.1 10.8 0 -0.1 0 ⊕ 6.3 6.3 6.3 6.2 5.9 ⊕ 6.3 6							
C322						-	
C323							
① 0 5.6 5.6 5.6 5.6 5.6 5.6 5.6 10:324 ⑤ 6.2 6.2 6.2 6.2 5.9 10:326 ① 5.9 5.9 6.0 6.3 5.9 5.9 ① 5.9 5.9 6.2 5.8 5.9 ① 5.9 5.9 6.2 5.8 5.9 ① 5.9 5.9 6.2 5.8 5.9 ① 5.9 5.9 6.2 5.8 5.9 ① 5.9 5.9 6.2 5.8 5.9 ① 5.9 5.9 6.2 5.8 5.9 ① 5.9 5.9 6.2 5.8 5.9 ① 0 1.7 1.9 1.6 1.6 2.1 2.1 ② 1.6 ① 2.3 2.3 2.3 4.6 ② 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							
G324							+
C326 (1) 5.9 5.9 6.0 6.3 5.9 5.9 (2) 5.9 5.9 5.9 6.2 5.8 5.9 (3) 5.9 5.9 5.9 6.2 5.8 5.9 (3) 5.9 5.9 5.9 6.2 5.8 5.9 (3) 1.7 1.9 1.6 1.6 2.1 2.1 2.1 (4) (5) (5) (6) (7)							
② 5.9 5.9 5.9 6.2 5.8 5.9 ③ 5.9 5.9 5.9 6.2 5.8 5.9 ⑤ 1.7 1.9 1.6 1.6 2.1 2.1 ⑥ 2.4 1.0 2.3 2.3 2.3 4.6 ⑦ 0 -0.1 10.8 0 -0.1 0 ⑥ 6.3 6.3 6.3 6.3 6.2 5.9 ⑥ 6.3 6.3 6.3 6.3 6.2 5.9							
(3) 5.9 5.9 5.9 6.2 5.8 5.9 (5) 1.7 1.9 1.6 1.6 2.1 2.1 (6) 2.4 1.0 2.3 2.3 2.3 4.6 (7) 0 -0.1 10.8 0 -0.1 0 (8) 6.3 6.3 6.3 6.3 6.2 5.9 (9) 6.3 6.3 6.3 6.3 6.2 5.9							
\$\begin{array}{cccccccccccccccccccccccccccccccccccc							
(a) 2.4 1.0 2.3 2.3 2.3 4.6 (b) 0 -0.1 10.8 0 -0.1 0 (c) 6.3 6.3 6.3 6.3 6.2 5.9 (d) 6.3 6.3 6.3 6.3 6.2 5.9							
⑦ 0 -0.1 10.8 0 -0.1 0 ⑥ 6.3 6.3 6.3 6.3 6.2 5.9 ⑨ 6.3 6.3 6.3 6.2 5.9							
(a) 6.3 6.3 6.3 6.3 6.2 5.9 (b) 6.3 6.3 6.3 6.3 6.2 5.9	6	2.4			2.3	2.3	4.6
② 6.3 6.3 6.3 6.3 5.9	O						
	(8)	6.3			6.3	6.2	5.9
	9	6.3	6.3	6.3	6.3	6.2	5.9
	10	6.3	6.3	6.2	6.2	6.2	5.9

	PAL	SECAM	NTSC 3.58	NTSC 4.43	S-VIDEO	ANALOG RGB
IC326 10	6.2	6.2	6.2	6.2	6.2	5.9
0	6.2	6.2	6.2	6.3	6.2	5.9
0	6.2	6.2	6.2	6.2	6.2	5.9
IC350 ①	6.6	6.5	6.4	6.3	6.1	6.9
2	6.2	6.2	6.2	6.3	6.0	6.4
3	6.2	6.2	6.2	6.3	6.0	6.4
Q300 B	2.5	2.5	2.2	2.2	2.2	2.2
C	10.2	10.2	10.4	10.5	10.4	10.5
E	1.9	1.9	1.6	1.6	1.6	1.6
0301 E	8.6	8.5	8.2	8.3	8.5	9.8
Q303 E	5.7	5.7	5.7	5.7	5.5	5.7
Q304 B	6.3	6.3	6.3	6.4	6.2	6.3
E	5.7	5.7	5.7	5.7	5.5	5.7
Q305 B	8.6	8.5	8.2	8.3	8.5	9.8
E	7.9	7.9	7.6	7.7	7.9	9.1
0307 E	1.4	1.4	1.1	1.2	1.4	2.7
Q309 B	0.1	1.4	0.2	0.1	0.1	0
		0.1	1.7	1.8	0.1	1.8
0312 C	8.2	1.8 8.2	8.6	8.3	8.3	8.1
Q313 B	8.2	8.2	8.6	8.3	8.2	8.1
E	8.8	8.8	9.3	9.0	8.9	8.7
Q314 B	11.9	6.4	11.9	11.9	11.9	11.9
C C	0	11.9	0	0	0	0
0315 B	3.3	3.2	2.9	3.1	3.2	3.3
E	3.9	3.9	3.5	3.8	3.8	4.0
Q318 B	12.1	12.0	11.7	11.9	12.1	12.1
C	1.0	1.0	1.2	1.0	1.0	0.9
Q322 B	2.4	2.4	2.3	2.3	5.6	2.4
E	1.8	1.8	1.8	1.8	5.0	1.8
Q323 B	5.0	5.0	0	0	0	0
C	0	0	3.5	3.5	3.5	3.6
Q324 B	4.1	4.2	0	0	0	0
C	0	0	0.8	0.8	0.8	1.3
O328 B	2.2	2.2	2.2	2.8	2.0	0
Q329 D	2.1	2.8	2.2	2.4		2.2
G	0	0	1.6	0	2.9	2.8
Q332 B	4.9	5.0	0	4.9	0	0
C	0	0	4.4	0	4.3	4.4
Q333 B	1.7	1.7	1.9	1.8	1.7	1.7
ε	1.5	1.5	1.7	. 1.5	1.5	1.4
Q336 G	4.7	4.6	4.6	4.7	4.2	4.8
D	4.3	4.3	4.3	4.3	4.5	4.3
Q339 B	12.3	- 12.5	12.5	12.4	12.5	12.3
Q347 B	0.1	4.2	0.1	0.1	0.6	0.1
C 0240 C	9.4	0.1	9.4	9.4	9.4	9.4
Q349 B	2.8	2.7	2.7	3.4	2.2	2.8
E 0354 B	12.0	3.3 0.6	3.4	0	0	3.4
Q354 8 E	12.0	0.6	0	-	0	- 0.2
0358 E	2.2	2.2	0	2.2	2.2	2.2
Q360 1	6.2	6.2	6.2	6.3	6.1	6.4
3	6.2	6.2	6.2	6.3	6.0	6.4
5	1.3	4.7	2.2	4.1	5.3	3.8
Q361 B	4.9	4.9	5.0	5.0	5.0	0.8
С	0.1	0	0	0	0.1	4.9
Q362 C	9.0	9.0	9.0	9.5	9.2	8.5
Q364 C	3.3	3.3	2.9	2.9	2.8	2.9
Q365 B	0.4	0	0.3	0.3	0.4	0.4
O369 B	0.8	0.9	0.8	0.8	0.9	4.9
0372 B	0	0	0	0	0	4.9
C 274 P	11.7	11.7	11.8	11.8	11.7	0
Q374 B	10.4	10.3	10.1	10.3	6.2	6.4
C	6.4	6.4	6.3	6.3	6.1	6.7
Q375 B	10.7	10.8	10.7	10.7	10.7	5.9
C	1 0	0.0	0	0	6.3	6.4
E		6.2	6.2	6.2	6.0	6.4
	1 3.5		4	1 2.4	1 2.0	

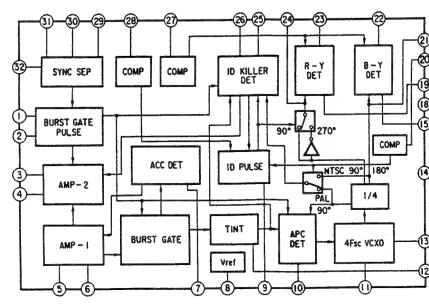
A BOARD (2/3) * MARK LIST

	PVM-14M4U/E/A	PVM-14M2U/E/A
C525	0.011 2kV : PP	0.01 2kV : PP
C527	#	470P 2kV
C553	0.082 200V : PT	#
C1520	150P 2kV B	#
C1524	100	#
C1525	0.0047 2kV E	#
C1537	0.33 100V : MPS	#
CN508	2P WHT: MINI	#
D544	MA111	# 1
D545	MA111	#
D546	V11N	#
D548	RD16ESB2	#
Q526	2SC4686A	#
Q527	2SC4686A	#
Q531	2SA1037K	#
Q532	IRF520	#
R559	330k : CHIP	220k : CHIP
R562	47 1/4W : FPRD	#
R566	47k: RN-CP	27k : RN-CP
R574	47k : CHIP	#
R577	10k : CHIP	#
R581	T 1k : CHIP	#
R1501	12k : CHIP	10k : CHIP
R1539	T100k : CHIP	#
R1542	22 : FPBD	#
R1580	47k : CHIP	#
R1581	10M 1W:RS	#
R1582	2M 1W : RS	#
R1583	470 1/2W : RF	#
R1599	T 10k 1/2W : RC	#
R2502	22k : CHIP	18k : CHIP
R2504	150k : CHIP	100k : CHIP
T501	1-453-233-11	1-453-232-11
T502	DFT	#

#: Not Used

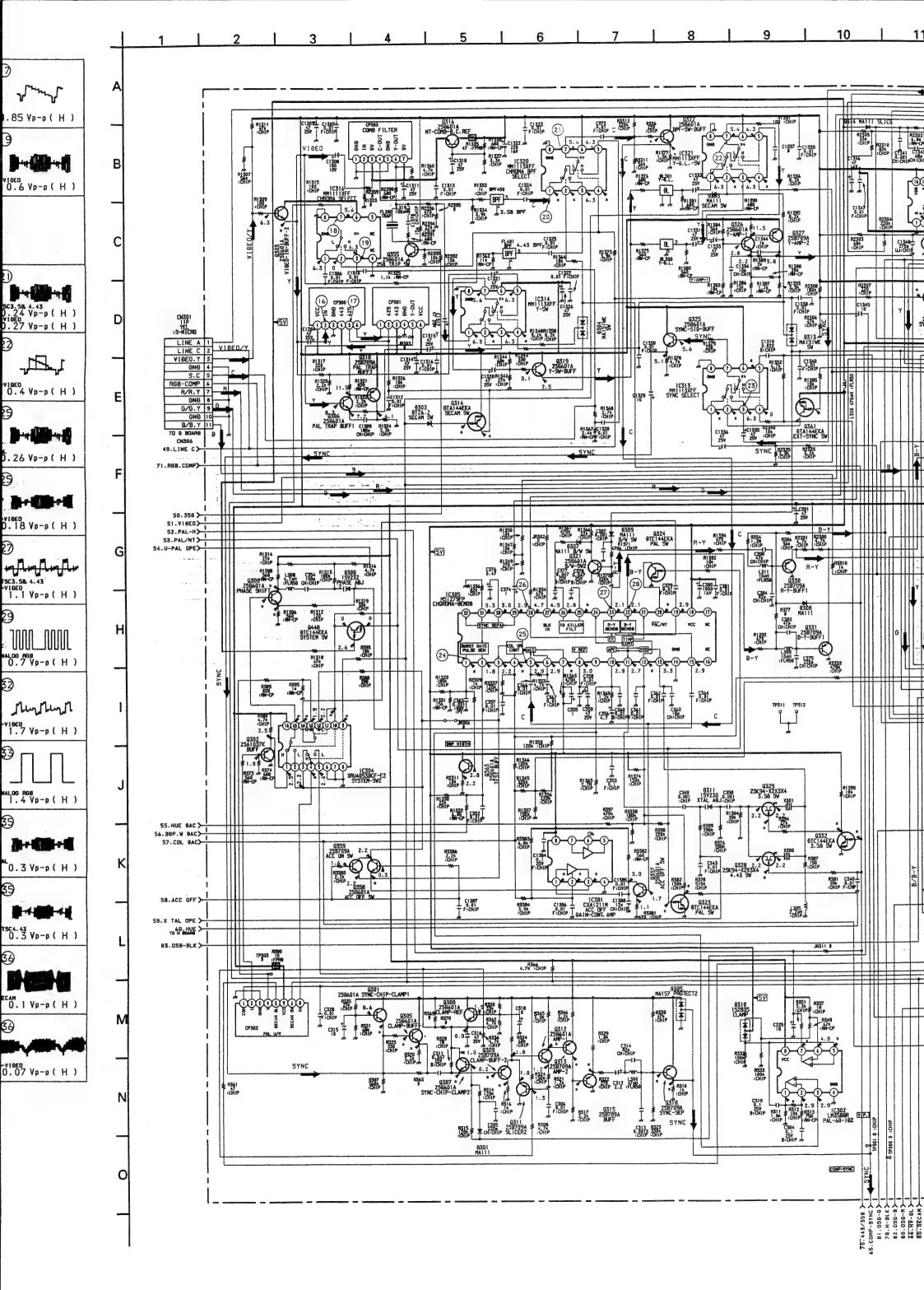


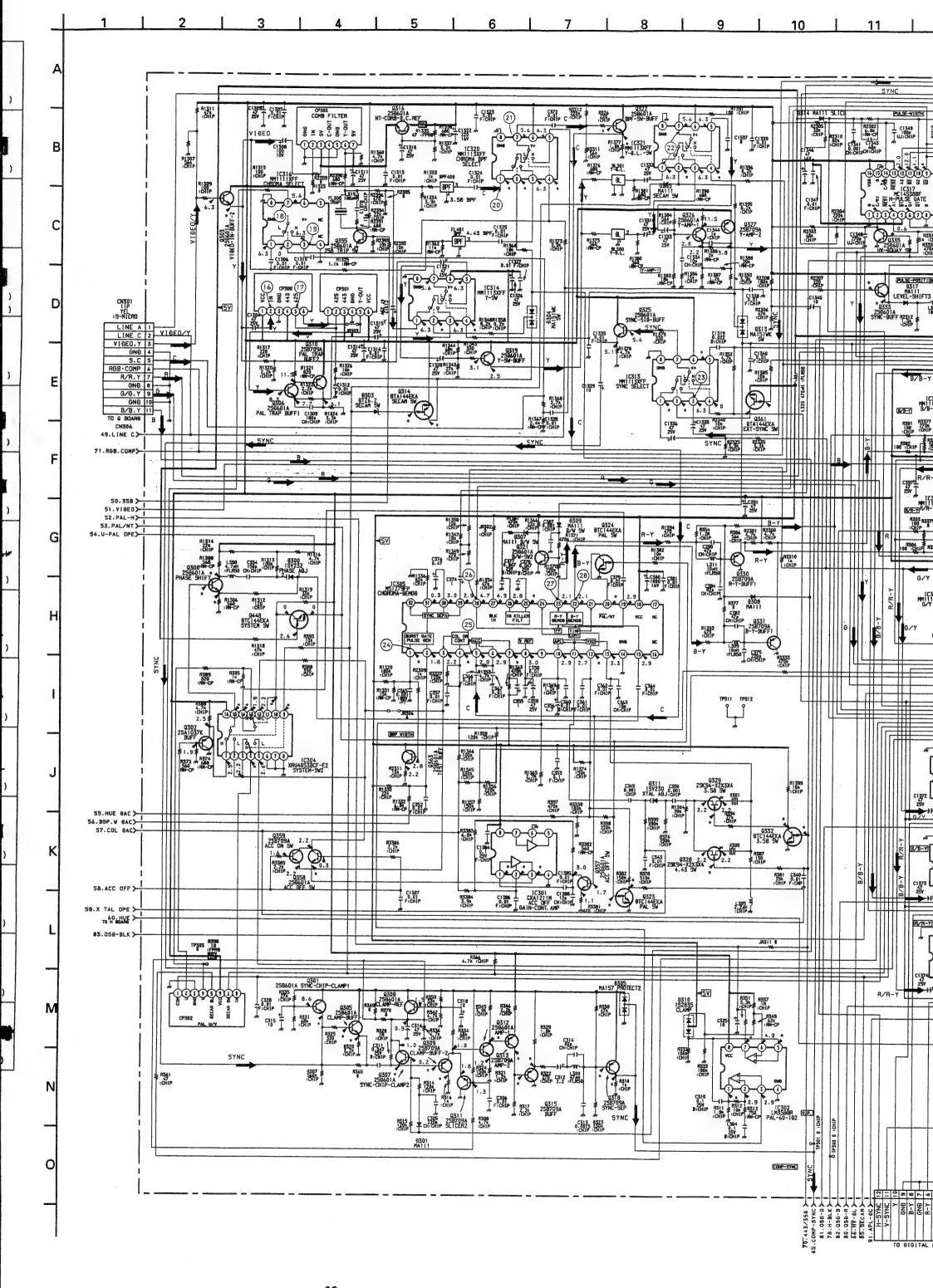
A BOARD 1C305 M51279FP



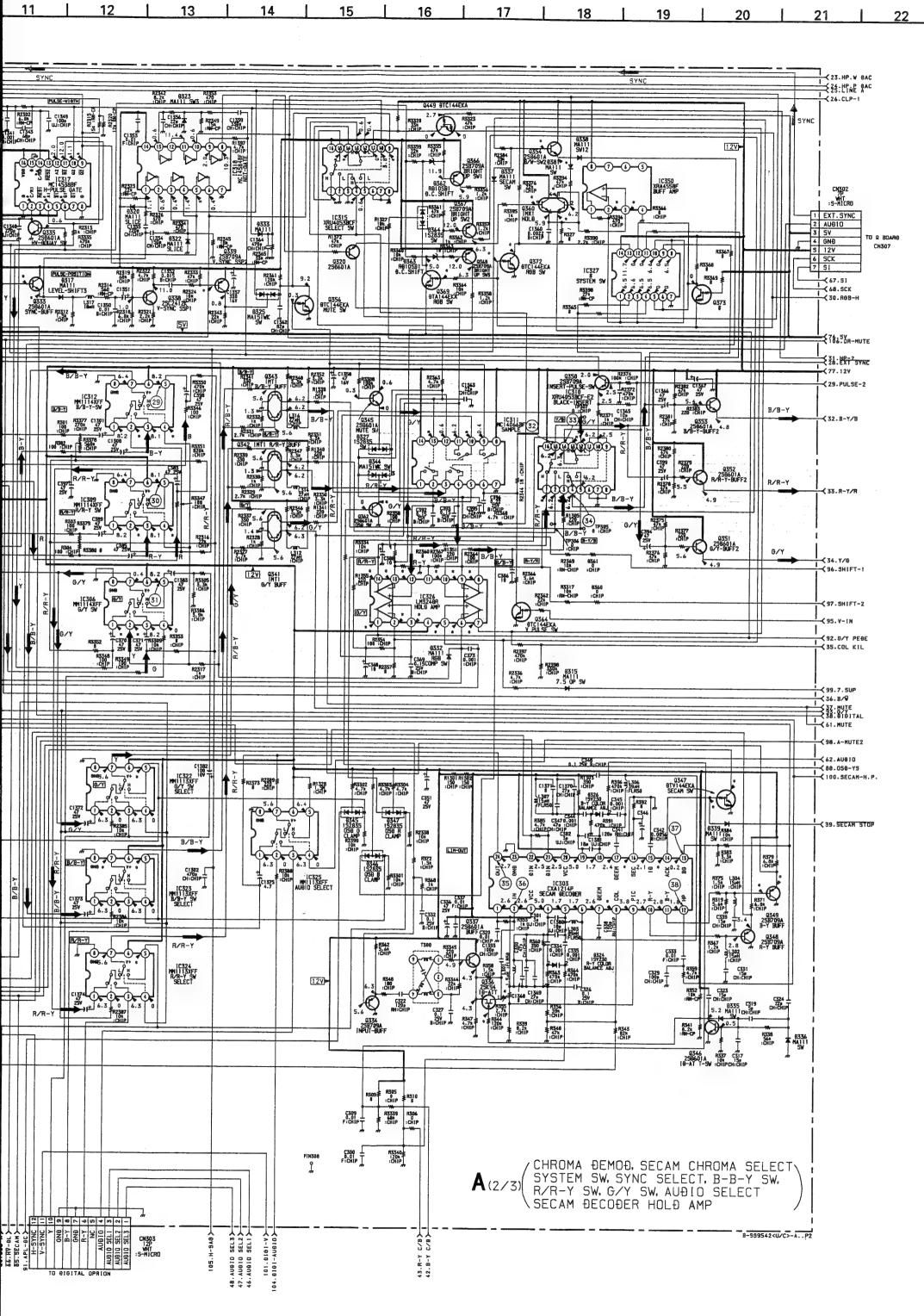
·A BOARD WAVEFORMS

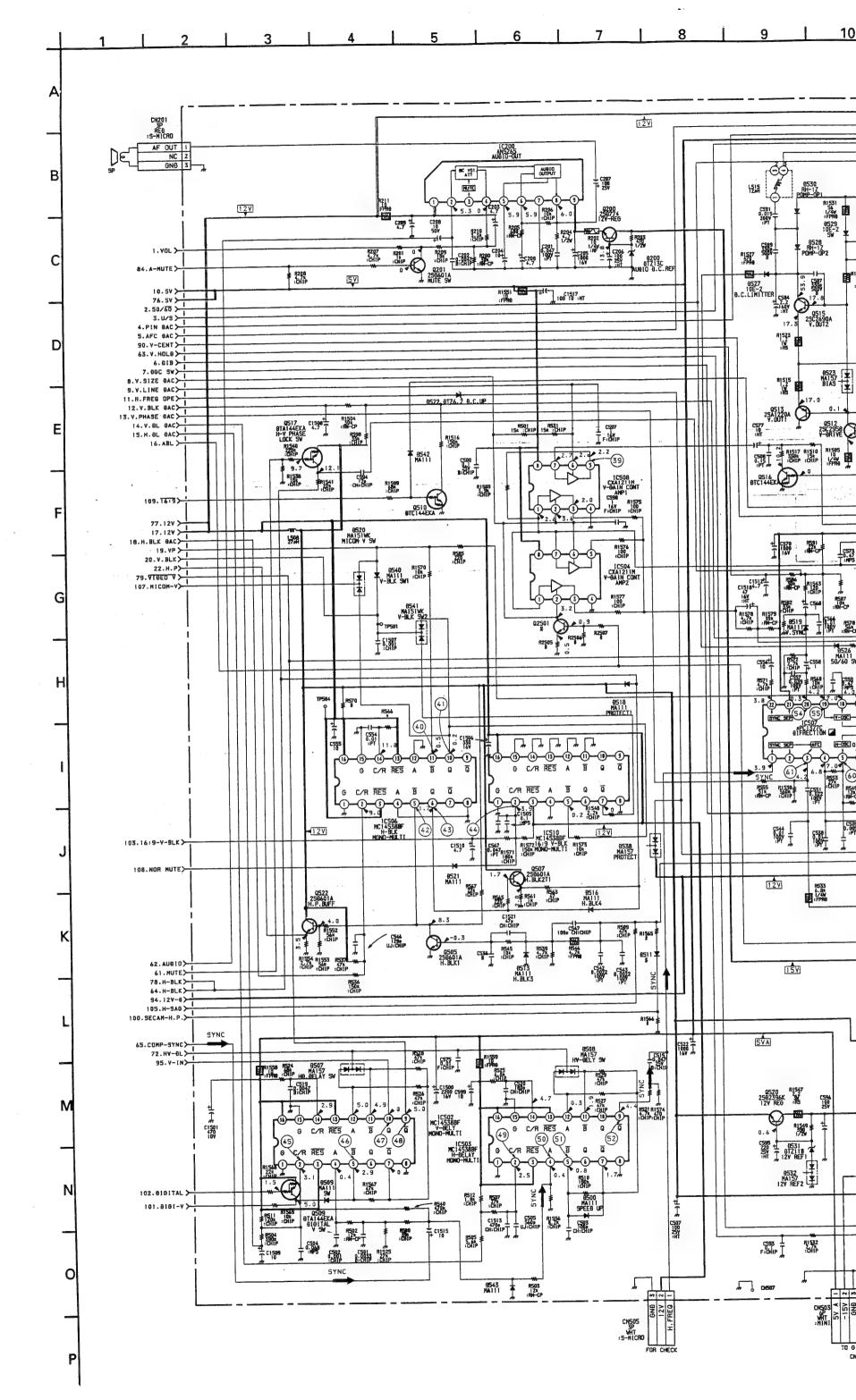
	(6)	(<u>l</u>)	17
	, 1	142-143-	Marray
	1.0 Vp-p(H)	3-V19E0 0.94 Vp-p (H)	0.85 Vp-p (H)
	0	13	(9
	التعاليا		
	S-VIDED	5-V10E0	S-410E0
	0.94 Vp-p (H)	0.6 Vp-p (H)	0.6 Vp-p (H)
	(9)	20	
	Post of	NTSC3.58	
	0.2 Vp-p(H)	NTSC3.58 0.24 Vp-p(H) NTSC4.43 0.12 Vp-p(H)	
	2)	0	2)
	D4004		NTSC3, 58, 4, 43
	0.27 Vp-p (H)	SECAM 0.17 Vp-p (H)	NTSC3.58.4.43 0.24 Vp-p(H) 5-V10E0 0.27 Vp-p(H)
	22	23	23
	Jammy	Monde	1_21_
	PAL 0.4 Vp-p (H)	MTSC3.58 0.37 Vp-p (H) NTSC4.43	S-V[0E0
	0.36 Vp-p(H)	4.U Vp-p(.H)	0.4 Vp-p(H)
			(3)
	ANAL DO . 200	V - V - V - V - V - V - V - V - V - V	PAI
	1.9 Vp-p (H)	1.0 Vp-p (H)	0.26 Vp-p (H)
	25 May and a	29	3
-		D-11 (1)	
	SECAM 0.2 Vp-p (H)	NTSC3.58. 4.43 0.23 Vp-p (H)	0.18 Vp-p (H)
	26	Ø	Ø
		manghalla	manghath
	V V V 5.4 Vp-p (H)	PAL 1.0 Vp-p (H)	NTSC3.58 4.43 S-VIDEO 1.1 Vp-p (H)
1	28	28 _	29
-	MANNE	MAN MAN	חחח חחחה
	0.8 Vp-p (H)	MTSC4.43 0.73 Vp-p (H) 5-V(0E0	ANALOG RGB
]	0.8 Vp-p(H) 0.85 Vp-p(H)	0.9 Vp-p(H)	ANALOG RGB 0.7 Vp-p(H)
	[39		3
			1 Junihunn
	ANALOG RGB 0.7 Vp-p (H)	ANALOG RGB 0.7 Vp-p (H)	3-V1060 1.7 Vp-p(H)
	33	33	3 □ □
		Thothe	
	ANALOG RGB	s-vieco 1.3 Vp-p (H)	ANALOG ROB
	33	39	69
	MANNAN	7000 0000	Bed Bed
	S-VIOE0 1.3 Vp-p (H)	ANALOG RGB 1.4 Vp-p (H)	PAL 0.3 Vp-p (H)
			(S)
	3	(35)	
	SECAM	M+553+553+	NTSC4, 43
	O. 1 Vp-p (H)	0.15 Vp-p (H)	0.3 Vp-p (H)
	33	❸	33
	5-VIBEO 0.2 Vp-p(H)	0.3 Vp-p (H)	SECAM 0.1 Vp-p (H)
	3	3 9	33
		-	
	NTSC3.58 0.07 Vp-p (H)	NTSC4.43 0.28 Vp-p (H)	3-V19EQ 0.07 Vp-p(H)
	(F)	38	
		1 1 1 1	
	3.0 Vp-p(H)	3.2 Vp-p(H)	1

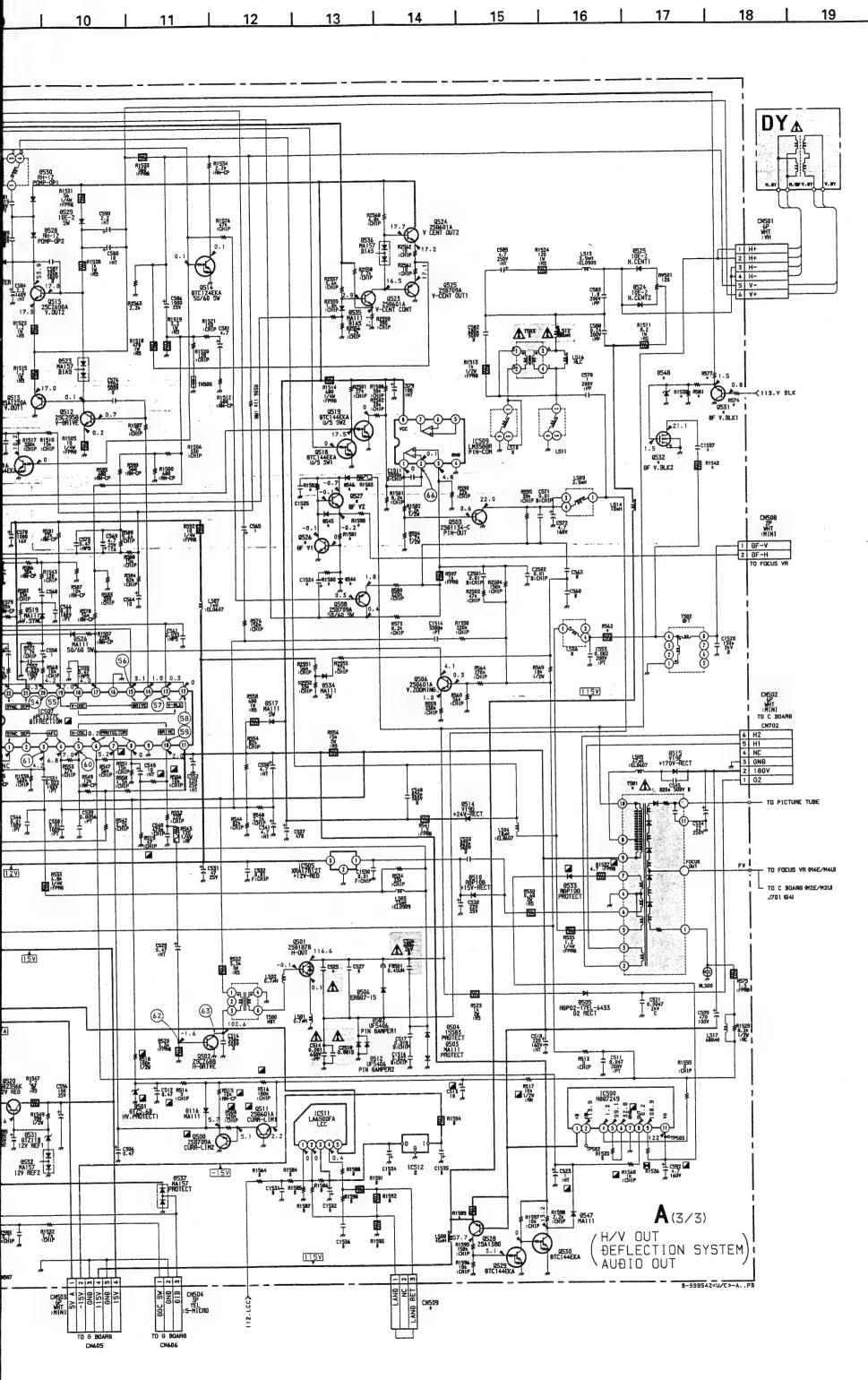


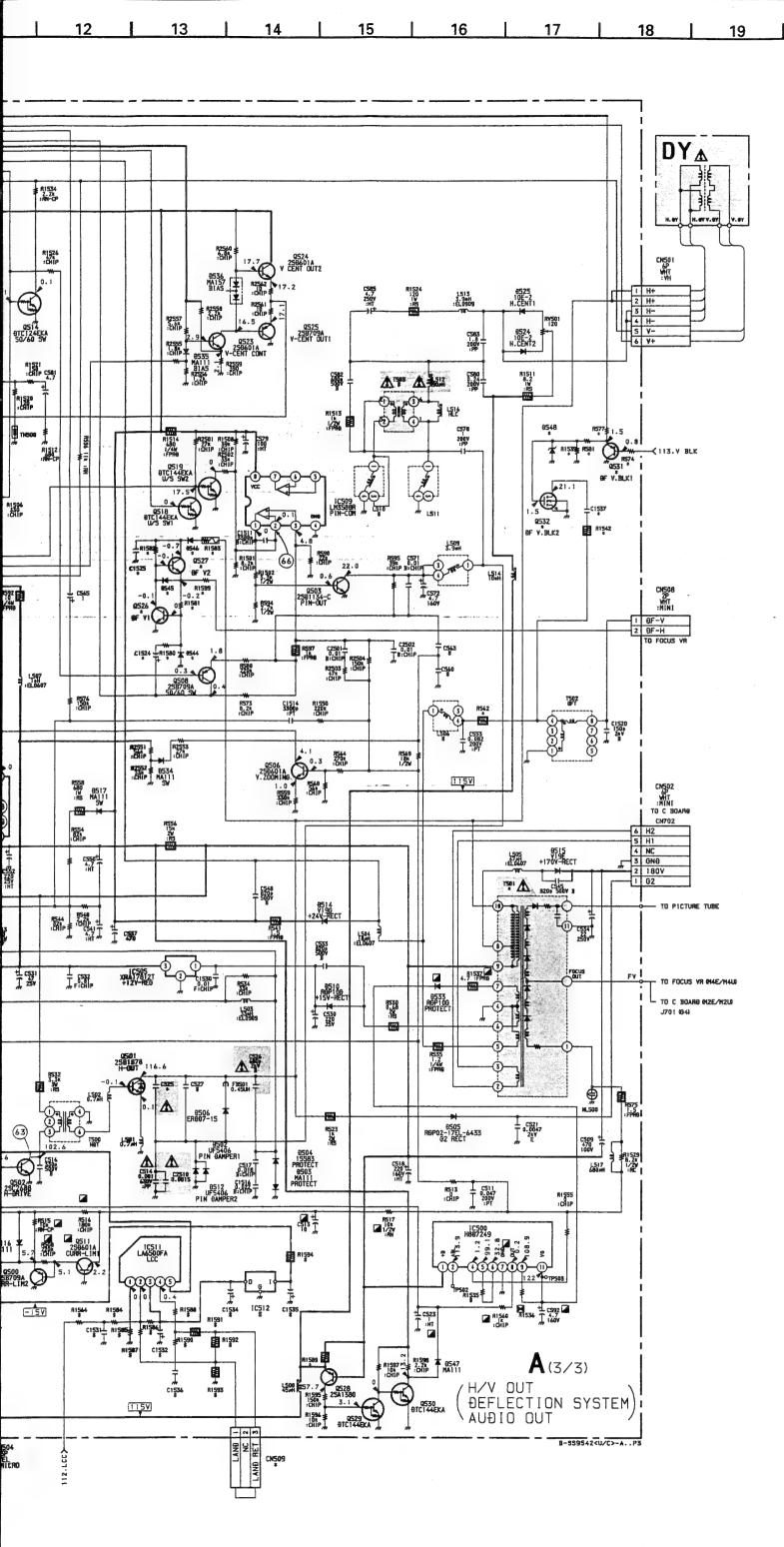


- 66 -









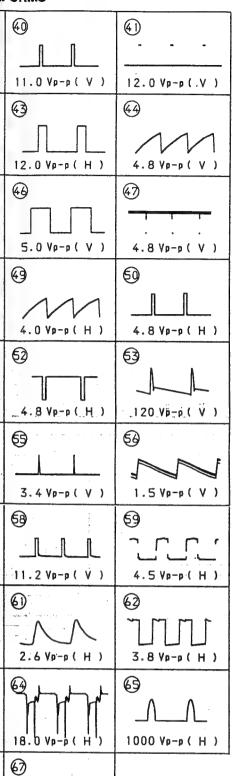
A BOARD WAVEFORMS

89	60
0.7 Vp-p (V)	11.0 Vp-p
42	€3
10.0 Vp-p (H)	12.0 Vp-p
6 3	€6
3.9 Vp-p (V)	5.0 Vp-p
48	49
	11
5.0 Vp-p(V)	4.0 Vp-p
(1)	19
111	· 7
4.2 Vp-p (H)	_ 4.8 Vp-p
6 9	5 3
11.0 Vp-p (V)	3.4 Vp-p
1	58
5.9 Vp-p (~V)	11.2 Vp-p
60	6
	\sim 1
3.8 Vp-p (H)	2.6 Vp-p
63	@
170 Vp-p (H)	
69	18.0 Vp-p
	A A A
<i>V</i> V 1	NN

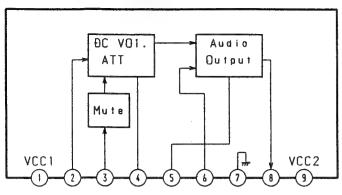
2.4 Vp-p (V)

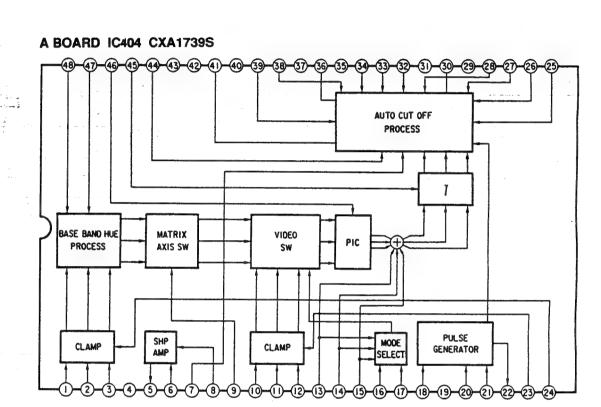
338 Vp-p (

EFORMS

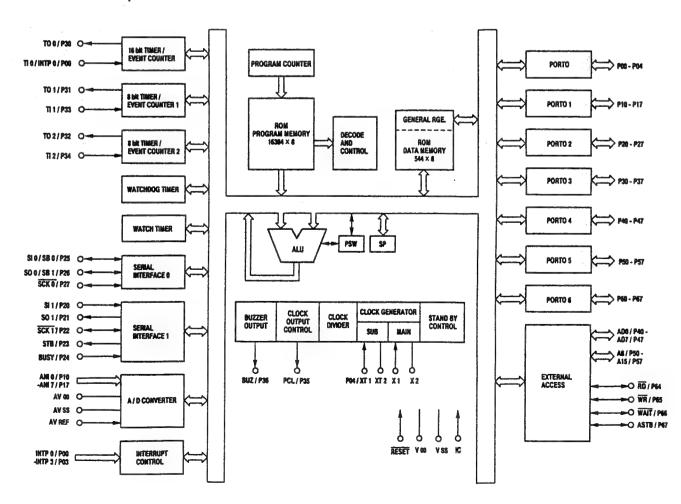


A BOARD IC200 AN5265

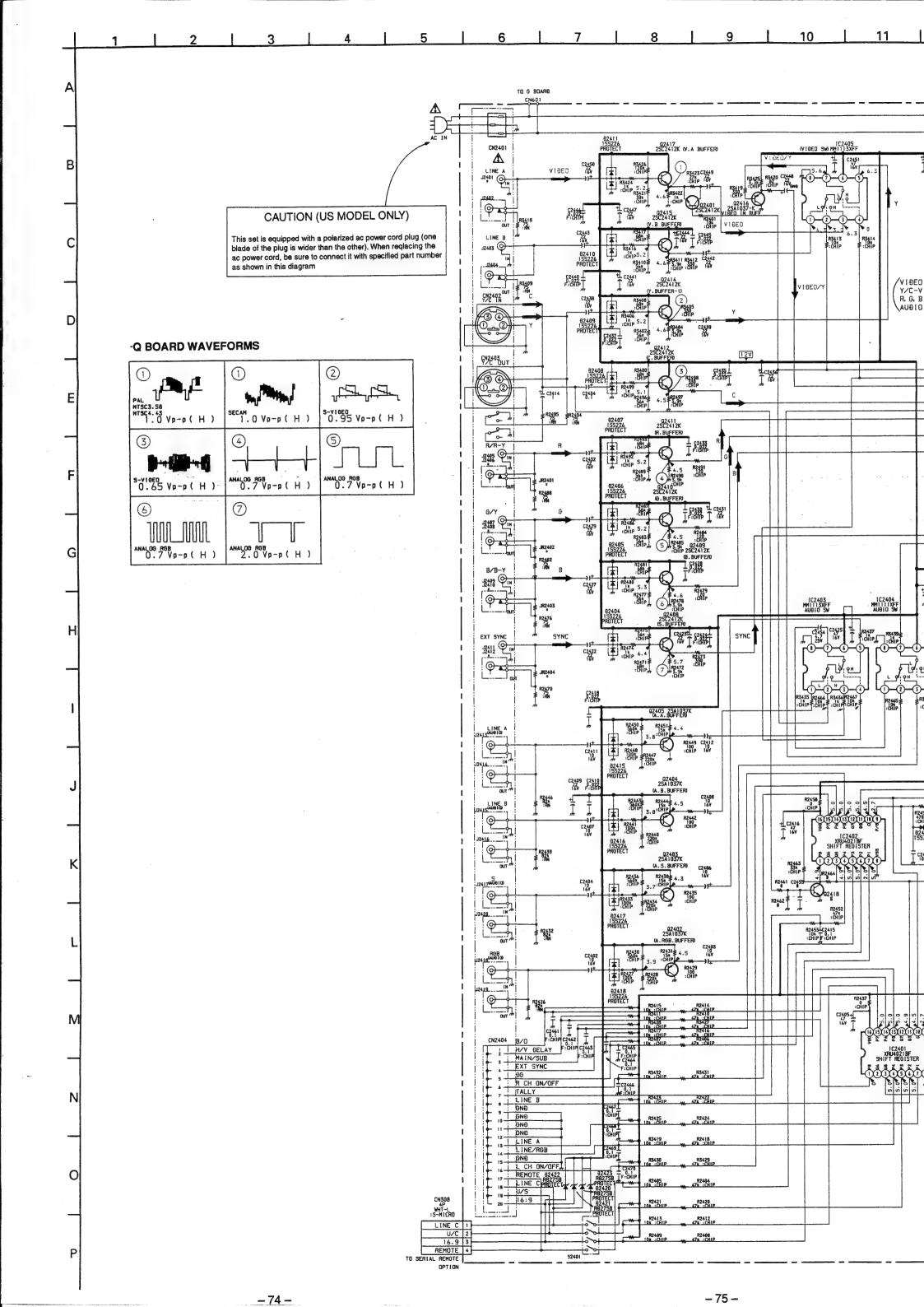


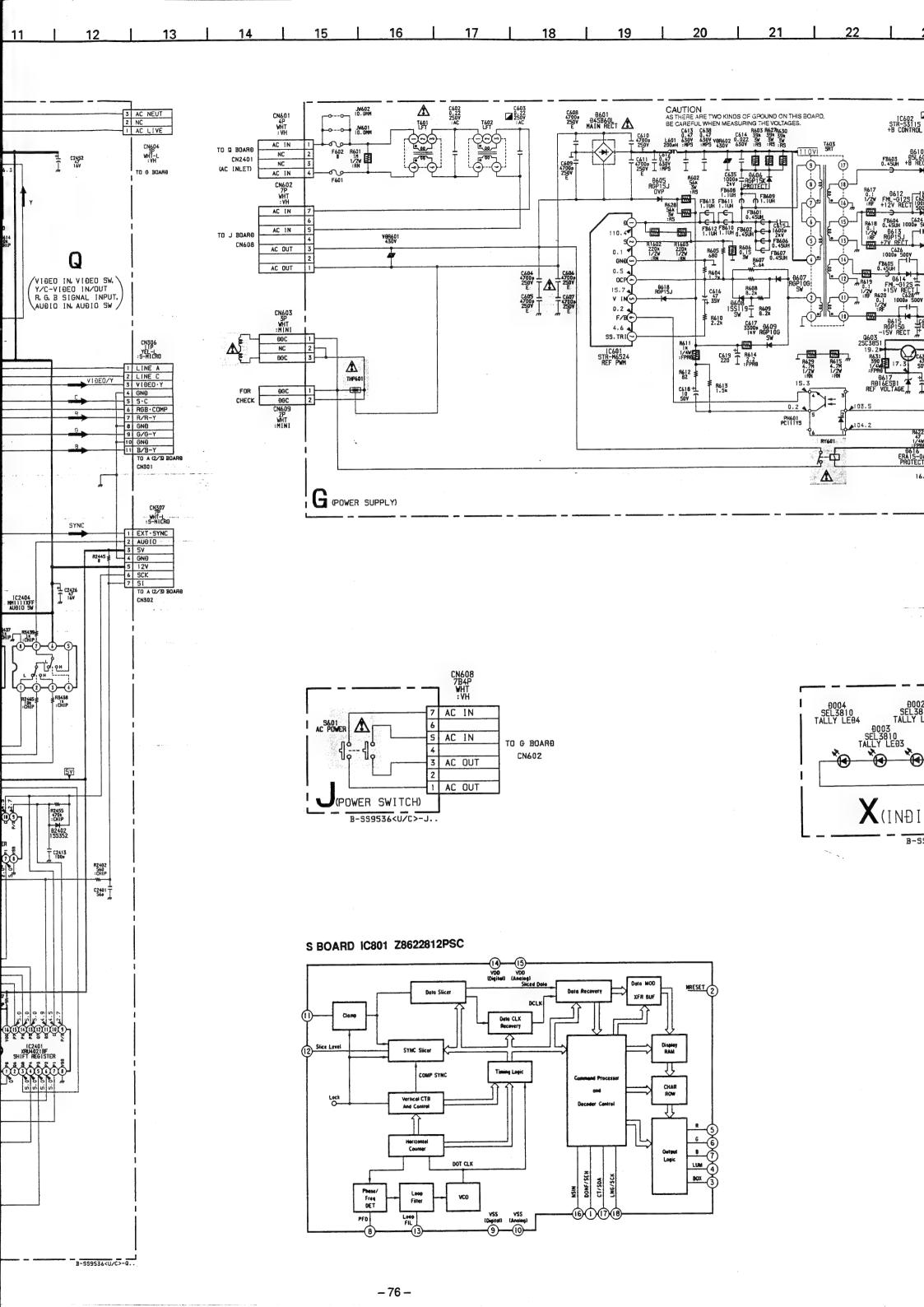


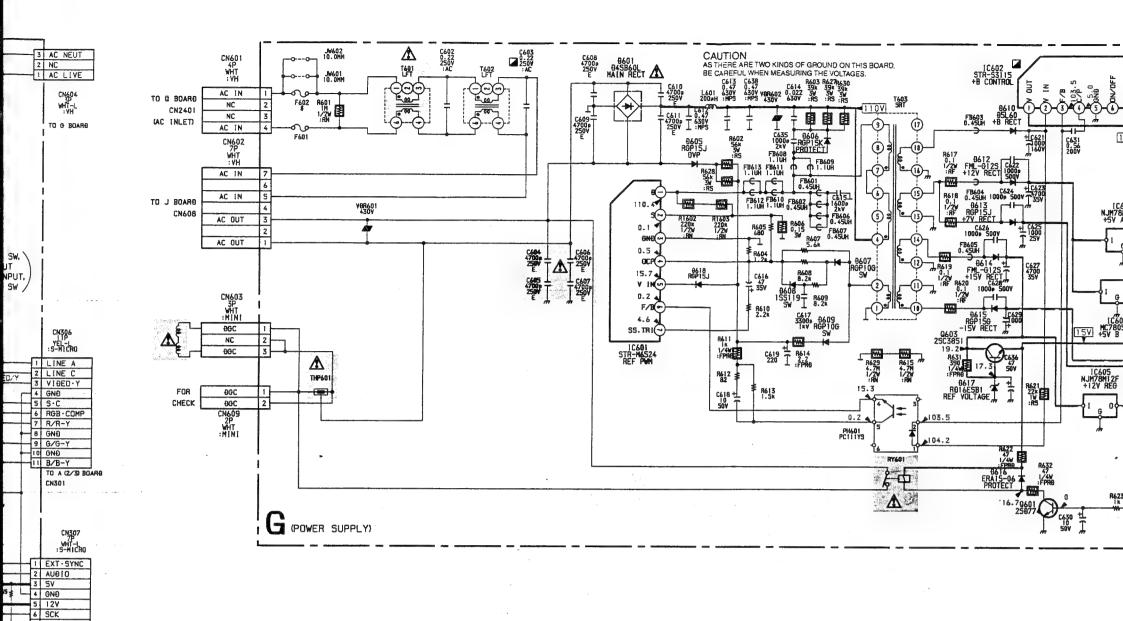
A BOARD IC101 µPD78013YCW



Schematic diagram GHJ QXS boards ⇒



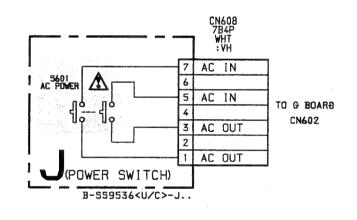




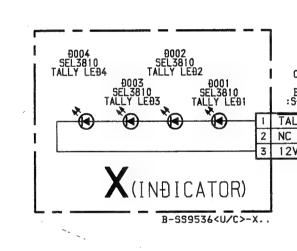
19

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21



16

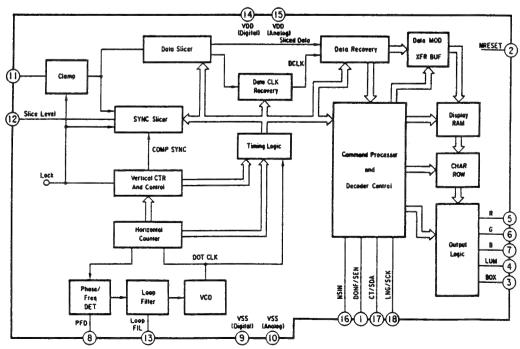


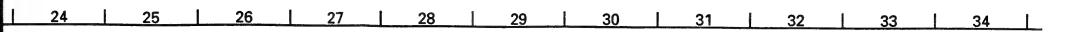


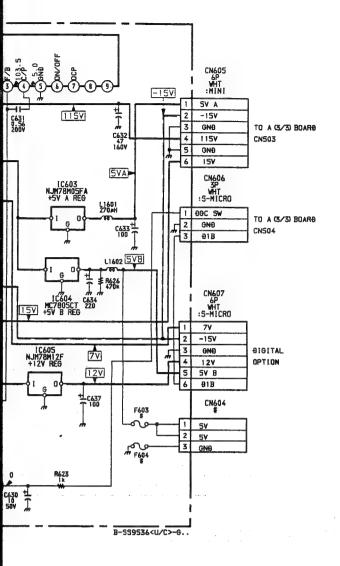
13

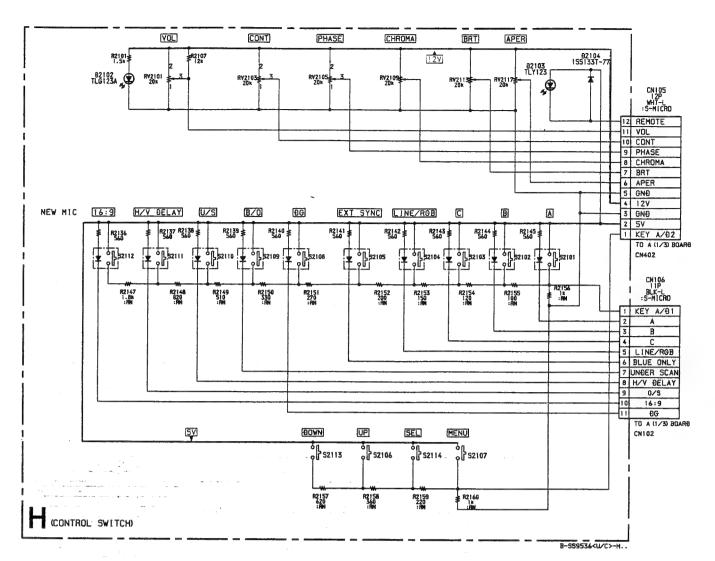
TO A (2/3) BOARD CN302

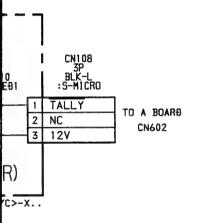
u∕c>-a...

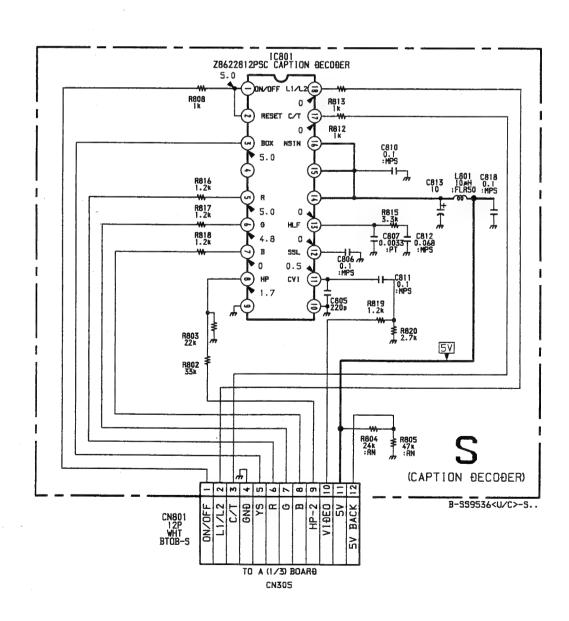






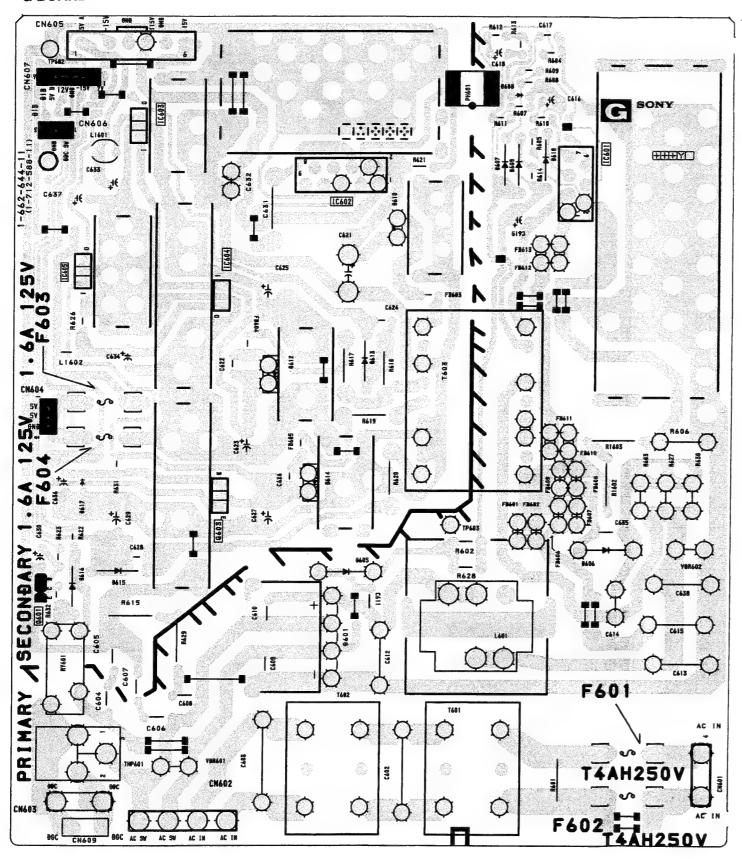




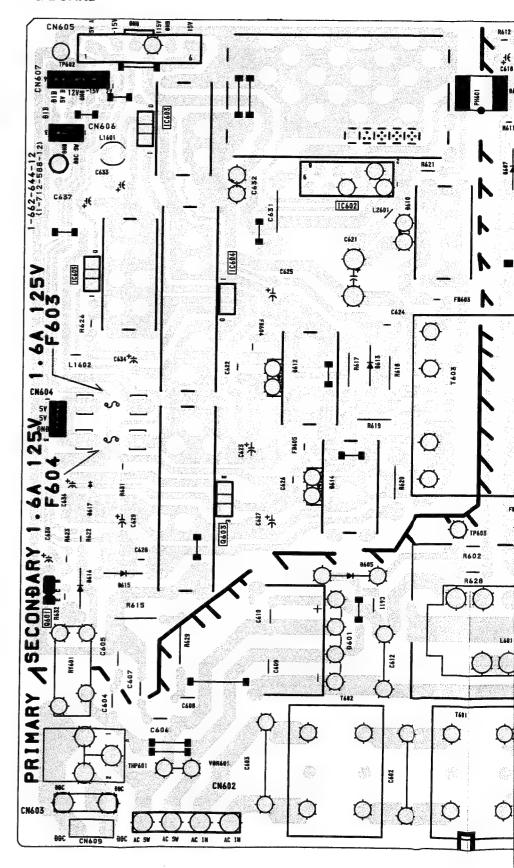




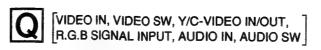
-G BOARD-



-G BOARD-









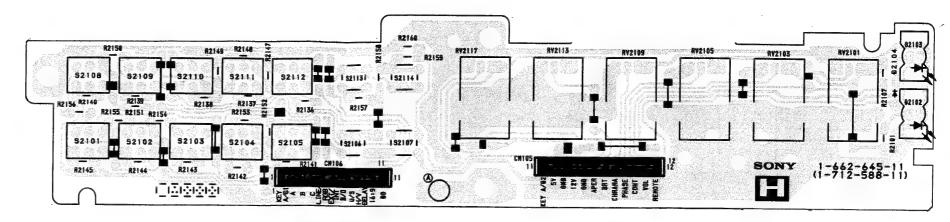




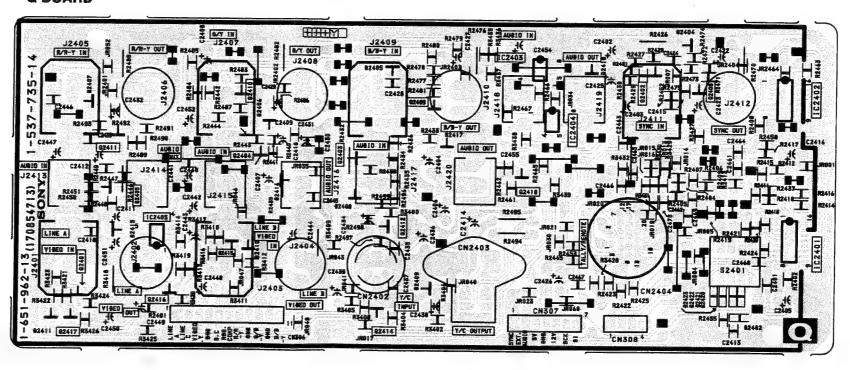
-H BOARD-

SONY

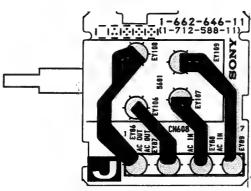
F601



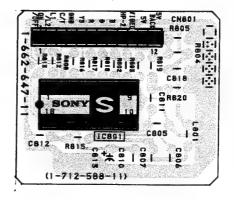
-Q BOARD-



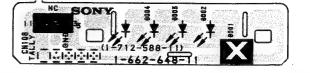
-J BOARD-

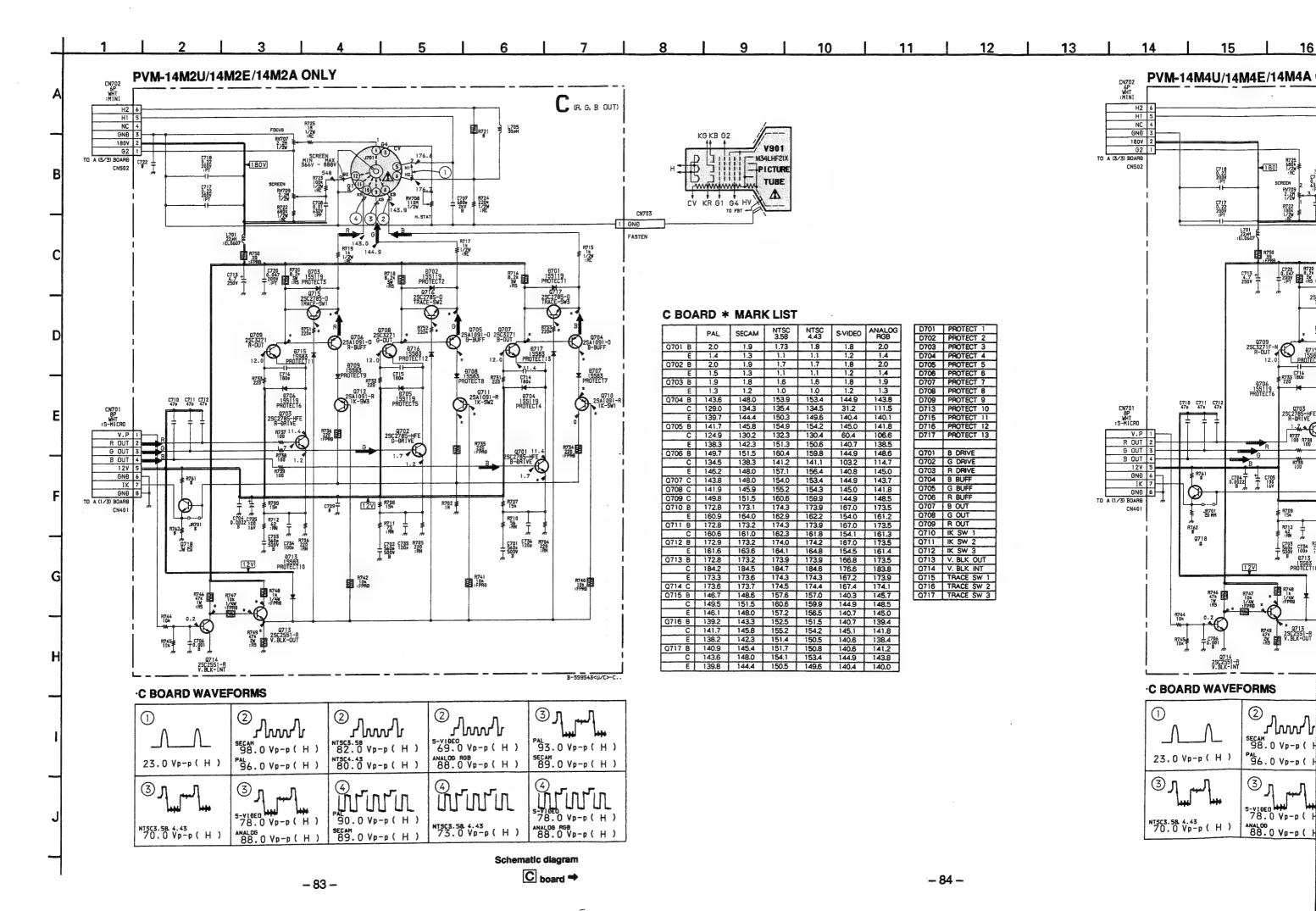


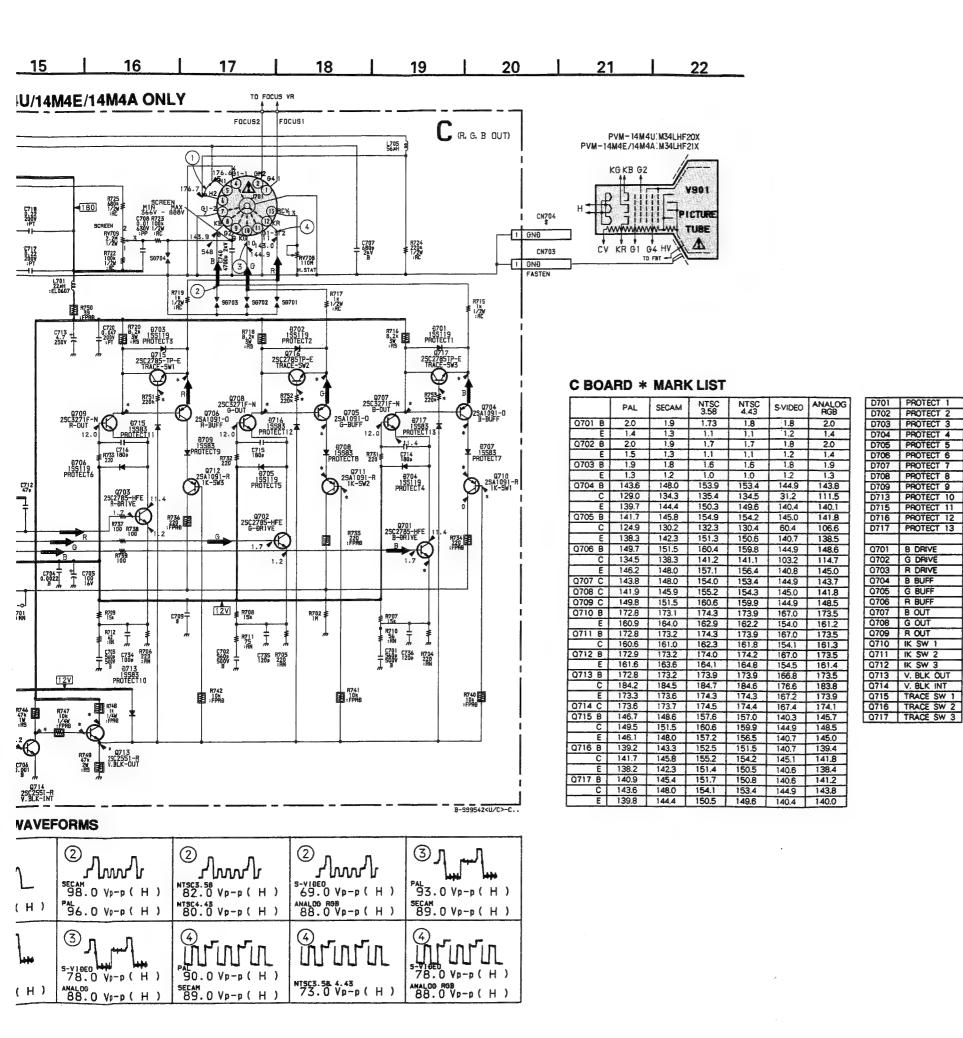
-S BOARD-PVM-14M2U/14M4U ONLY



-X BOARD-

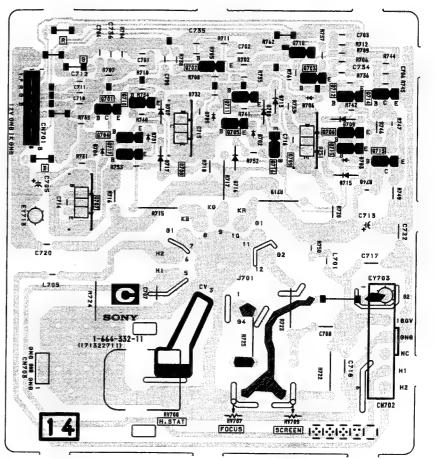




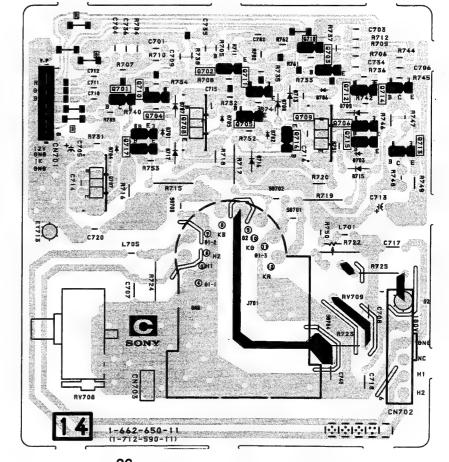




-C BOARD- PVM-14M2U/14M2E/14M2A ONLY

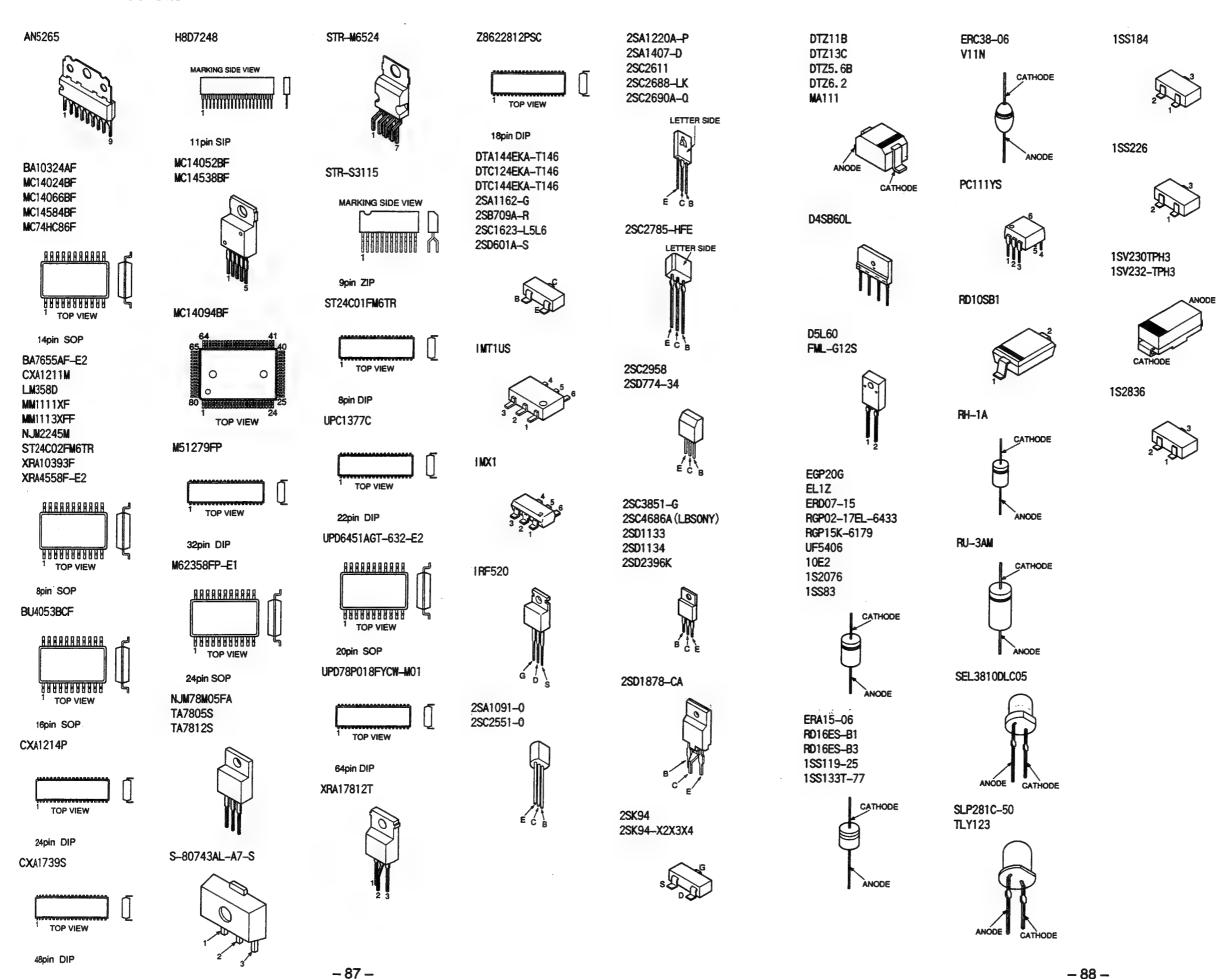


-C BOARD- PVM-14M4U/14M4E/14M4A ONLY



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6-5. SEMICONDUCTORS



SECTION 7 EXPLODED VIEWS

(14M4U/E/A)

NOTE:

• Items with no part number and no description are not stocked because they are seldom required for routine service.

▼ : 7-685-881-09

7-1. CHASSIS

• : 7-685-648-79 +BVTP 3X12 +PS 4X8 **1**: 7-682-661-01 +BVTP 3X8 **▲**: 7-685-646-79 +BVTP 4X16 **♦**: 7-685-663-79

+BVTT 4X8

- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The componants identified by shading and mark ∆ are critical for safety. Replace only with part number specified.

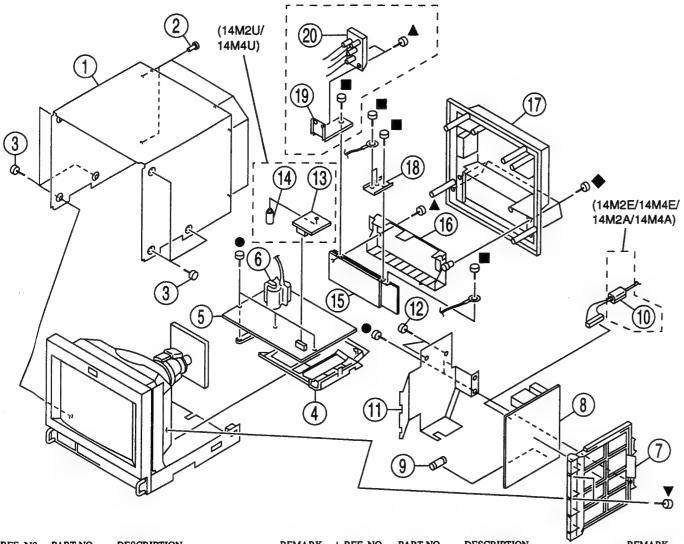
Les composants identifies par une trame et une marque Å sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

7-2. PICTURE TUBE

: 7-685-648-79 +BVTP 3X12 0:7-682-563-09 +B 4X12

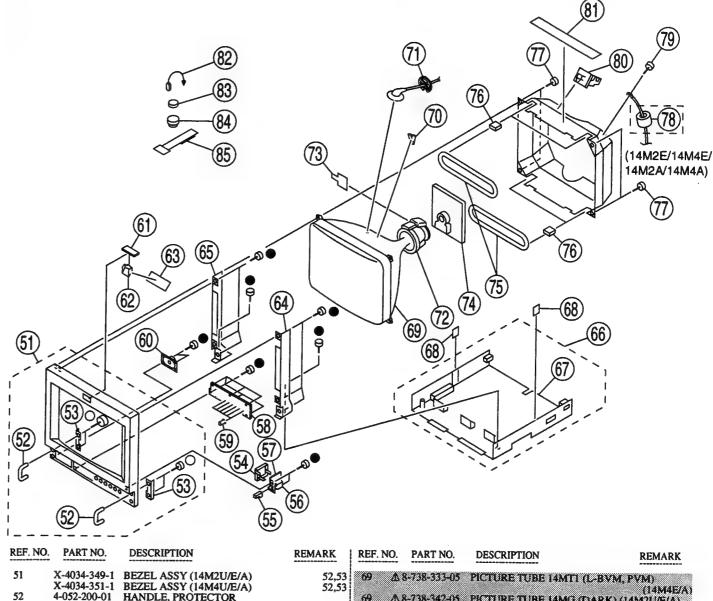
The componants identified by shading and mark ∆ are critical for safety. Replace only with part number specified.

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



REF. N	O. PART NO.	DESCRIPTION	REMARK	REF.
1	X-0515-323-0	COVER ASSY, TOP		9
		(14M2U	/14M4U/14M2E/14M4E)	10
	X-4034-350-1	COVER ASSY, TOP (14N	/2A/14M4A)	
2	4-391-825-01	RIVET, NYLON		11
3	4-847-802-11	SCREW (OS), CASE, CL	ΔW	12
4	*4-043-690-01	BRACKET, MAIN		12
4	4-043-090-01	DRACKET, MAIN		10
_				13
5		A BOARD, COMPLETE		14
	*A-1298-006-A	A BOARD, COMPLETE	(14M2U/E/A)	15
6	A 1-453-232-11	TRANSFORMER ASSY.	FLYBACK	16
			(14M2U/E/A)	17
	£1.453-203-11	TRANSFORMER ASSY.		1 1
	E1 400 600 11	INTEREST CRITER (BOT,	(14M4U/E/A)	18
~~~	*4-043-689-01	BRACKET, G	(A-MA-O/EA/A)	
,	*4-043-009-01	BRACKEI, G		19
_				20
8	*A-1316-302-A	G BOARD, COMPLETE		

1	REF.	NO.	PART N	Ю.	DESCRIPTION	REMARK
l	9	A.	-576-231	-11	FUSE (H.B.C.) 4A/250V	
E)	10	1	-543-653	-11	CORE ASSY, BEAD (DI	
					(14M2E	/14M4E/14M2A/14M4A)
ł	11	* 4	I-057-974	-01	SHIELD, G PC BOARD	
	12	4	-382-854	-11	SCREW (M3X10), P,SW	(+)
1						
	13	* /	<b>\-1390-7</b> (	05-A	S BOARD, COMPLETE	
į	14	*3	-687-542	-41	SPACER, PC BOARD SP	PACE (14M2U/14M4U)
- 1	15	1	-537-735	-14	TERMINAL BOARD AS	SY, I/O (A) (O BOARD)
<b>₩</b>	16	4	-043-688	-01	PANEL, CONNECTOR	
0	17	4	-055-635	-01	COVER, REAR	
<b>#</b>						
0	18	*4	-058-363	-01	TERMINAL, EARTH	
	19	4	-057-971	-01	BRACKET, FOCUS VOL	UME
- 13	20	A.	-223-417	-11	RESISTOR ASSY (HIGH	-VOLTAGE)
-18					Access to the second se	(14M4U/E/A)



1	(52)—(6		(55)				
REF. NO	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51 52 53 54			52,53 52,53 E	<b>69 ∆</b> 70	8-738-342-05 3-703-961-01	PICTURE TUBE 14MT1 (L PICTURE TUBE 14MG (D/ SPACER, DY	(14M4E/A)
55 56 A	4-043-683-01 1-692-921-01 * A-1388-193-A * A-1372-302-A	BUTTOM, POWER SWITCH SWITCH, PUSH (A.C. POWEI J BOARD, COMPLETE H BOARD, COMPLETE KNOB, CONTROL		72 A 73 74 * 74 *	1-451-457-11 8-451-472-11 X-2105-533-1 A-1331-627-A A-1331-631-A	HOLDER, HV CABLE DEFLECTION YOKE (14M DEFLECTION YOKE (14M PLATE ASSY, CORRECTION C BOARD, COMPLETE (14C C BOARD, COMPLETE (14C)	2U/E/A) DN, TLH  M4U/E/A)  M2U/E/A)
62 3 63 64 3 65 66 67 68	* 4-043-682-01 4-044-606-01 * A-1450-188-A * A-1450-187-A X-4031-711-1 4-391-840-04 4-042-608-01	X BOARD, COMPLETE REFLECTOR, LED CUSHION, TALLY BRACKET ASSY (R), SIDE BRACKET ASSY (L), SIDE CABINET ASSY, BOTTOM CABINET, BOTTOM	67 /M, PVM) (14M4U)	76 *4 77 4 78 1 79 4 80 4 81 4 82 4 83 1 84 1	4-316-015-00 4-365-808-01 1-543-827-11 4-389-025-01 1-033-681-01 1-391-833-01 1-308-870-00 1-452-032-00	CLAMP, SLEEVE FERRITE (14M2E/14	: M4E/14M2A/14M4A) I WASHER) ISK : 15mmø

## SECTION 8 ELECTRICAL PARTS LIST



## NOTE:

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

- The components identified by in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

## **RESISTORS**

- · All resistors are in ohms
- F : nonflammable
- CAPACITORS PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

						pies	ase include the po	pard name.	•	
REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		Ī	REMARK
	* A-1298-002-A	A BOARD, COMPLE			C201	1-137-353-11	MYLAR	0.047MF	10%	100V
		A BOARD, COMPLE	(PVM FE	-14M4U/E/A) -14M2U/E/A)	C203 C204	1-163-017-00 1-126-963-11 1-126-964-11 1-126-767-11 1-128-526-11	ELECT	0.0047MF 4.7MF 10MF 1000MF 100MF	10% 20% 20% 20% 20%	50V 50V 50V 16V 25V
	4-382-854-11	SCREW (M3X10), P, S' SCREW +PSW 3X8 <band filter:<="" pass="" td=""><td></td><td></td><td>C207 C208 C209 C300</td><td>1-104-665-11 1-126-964-11 1-126-963-11 1-163-031-11</td><td>ELECT ELECT ELECT CERAMIC CHIP</td><td>100MF 10MF 4.7MF 0.01MF</td><td>20% 20% 20%</td><td>25V 50V 50V 50V</td></band>			C207 C208 C209 C300	1-104-665-11 1-126-964-11 1-126-963-11 1-163-031-11	ELECT ELECT ELECT CERAMIC CHIP	100MF 10MF 4.7MF 0.01MF	20% 20% 20%	25V 50V 50V 50V
<b>BP</b> F400	1-236-363-11	FILTER, BAND PASS			C301		CERAMIC CHIP		0.25PF	50V
C105		<capacitor> CERAMIC CHIP 100PI</capacitor>		50V	C302 C304 C305 C306 C309	1-164-004-11 1-163-259-91 1-163-031-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.1MF 220PF 0.01MF	0.25PF 10% 5%	50V 25V 50V 50V 50V
C106 C114 C115 C116	1-163-031-11 1-163-031-11	CERAMIC CHIP 100PI CERAMIC CHIP 0.01M CERAMIC CHIP 0.01M CERAMIC CHIP 0.01M	F F	50V 50V 50V 50V	C310 C311 C312 C313	1-163-809-11 1-126-961-11	CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP	0.047MF 2.2MF	10% 10% 20%	25V 25V 50V 50V
C117 C118 C119	1-163-259-91	CERAMIC CHIP 0.01M CERAMIC CHIP 220PH	5%	50V 50V	C314	1-163-249-11	CERAMIC CHIP	82PF	5%	50V
C119 C121 C123	1-163-237-11	CERAMIC CHIP 0.1MI CERAMIC CHIP 27PF CERAMIC CHIP 0.1MI	5%	50V 50V 50V	C315 C316 C317 C318	1-126-964-11 1-104-664-11 1-163-231-11 1-126-964-11	ELECT CERAMIC CHIP	10MF 47MF 15PF 10MF	20% 20% 5% 20%	50V 25V 50V 50V
C124 C132 C133	1-163-141-00	CERAMIC CHIP 100PI CERAMIC CHIP 0.0011 CERAMIC CHIP 100PI	MF 5%	50V 50V 50V	C319 C320	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V 50V
C134 C135		CERAMIC CHIP 100PI CERAMIC CHIP 100PI		50V 50V	C322 C323 C324	1-163-119-00 1-163-231-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	120PF 15PF	5% 5% 5%	50V 50V 50V
C136 C140 C141	1-164-004-11	CERAMIC CHIP 100PI CERAMIC CHIP 0.1MI CERAMIC CHIP 0.002	10%	50V 25V 50V	C325 C326	1-126-964-11		10MF	20%	50V 25V
C142 C143	1-165-319-11	CERAMIC CHIP 220PF CERAMIC CHIP 0.1MI	7	50V 50V	C327 C328 C329	1-164-004-11 1-163-031-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.1MF 0.01MF	10%	25V 50V 50V
C144 C145 C154	1-165-319-11	CERAMIC CHIP 0.1MI CERAMIC CHIP 0.1MI CERAMIC CHIP 0.022	7	50V 50V 50V	C330 C331	1-163-243-11	CERAMIC CHIP CERAMIC CHIP	47PF	5% 5%	50V 50V
C155 C156	1-163-023-00	CERAMIC CHIP 0.015 CERAMIC CHIP 0.006	MF 10%	50V 50V	C332 C333 C334	1-164-004-11 1-163-031-11	CERAMIC CHIP CERAMIC CHIP	0.1MF 0.01MF	10%	25V 50V
C157 C158 C159	1-163-809-11	CERAMIC CHIP 0.0068	MF 10%	50V 25V	C335	1-163-141-00	CERAMIC CHIP CERAMIC CHIP	0.001MF	5% 5%	50V 50V
C161 C162	1-104-664-11	CERAMIC CHIP 0.0681 ELECT 47MF CERAMIC CHIP 0.0011	20%	25V 25V 50V	C336 C337 C338	1-163-119-00	CERAMIC CHIP CERAMIC CHIP	120PF	20% 5%	25V 50V 50V
C164 C165	1-165-319-11	CERAMIC CHIP 0.1MI CERAMIC CHIP 0.1MI	7	50V 50V	C339 C340		CERAMIC CHIP CERAMIC CHIP		5%	50V 50V
C166 C167 C168	1-164-004-11 1-126-925-11 1-126-925-11		F 20%	25V 10V 10V	C341 C342 C343	1-163-018-00 1-163-031-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.0056MF 0.01MF		50V 50V 50V
C169 C171	1-163-251-11	CERAMIC CHIP 0.01M CERAMIC CHIP 100PE		50V 50V	C344 C345	1-163-141-00 1-163-141-00	CERAMIC CHIP CERAMIC CHIP	0.001MF 0.001MF	5% 5%	50V 50V
C174 C200	1-163-243-11 1-126-963-11	CERAMIC CHIP 47PF ELECT 4.7MI	5% 20%	50V 50V	C346 C347	1-126-960-11 1-163-243-11	ELECT CERAMIC CHIP	1MF 47PF	20% 5%	50V 50V



REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
C348 C349 C350	1-163-141-00	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.001MF CERAMIC CHIP 0.001MF		25V 50V 50V	C420 C421 C422 C423	1-164-222-11 1-126-960-11	CERAMIC CHIP 0.04 CERAMIC CHIP 0.22 ELECT 1MI CERAMIC CHIP 0.04	MF 20%	25V 50V
C351 C352 C353	1-165-319-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.1MF	20%	25V 50V 50V	C424 C426	1-163-809-11	CERAMIC CHIP 0.04 CERAMIC CHIP 47P	7MF 10%	
C354 C355 C356	1-126-960-11		5% 20%	50V 50V	C427 C428 C429	1-104-661-91 1-163-031-11	CERAMIC CHIP 0.01	MF 20%	50V 16V 50V
C357 C358 C359		CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF	20%	50V 50V 50V 25V	C430 C431 C432		CERAMIC CHIP 0.1M CERAMIC CHIP 0.1M	IF.	16V 50V 25V
C360 C361	1-163-031-11	CERAMIC CHIP 0.01MF	10%	50V	C433 C434 C435	1-163-235-11 1-164-004-11	CERAMIC CHIP 22P CERAMIC CHIP 0.1M CERAMIC CHIP 6PF	5%	50V 25V
C362 C363 C364 C365	1-163-099-00	CERAMIC CHIP 0.01MF CERAMIC CHIP 18PF CERAMIC CHIP 0.01MF MYLAR 0.001MF	5% 10%	50V 50V 50V 100V	C436 C437 C438	1-164-004-11	CERAMIC CHIP 0.11 CERAMIC CHIP 0.11 CERAMIC CHIP 0.04	F 10%	25V 25V
C366 C367	1-163-031-11 1-163-031-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF	10%	50V 50V	C439 C440	1-163-809-11	CERAMIC CHIP 0.04 CERAMIC CHIP 0.11	7MF 10%	25V 25V 25V
C368 C369 C370	1-124-261-00 1-164-298-11 1-104-664-11	CERAMIC CHIP 0.15MF	20% 10% 20%	50V 25V 25V	C441 C442 C443 C444	1-163-243-11	CERAMIC CHIP 0.04 CERAMIC CHIP 47P	7MF 10% 5%	50V 25V 50V
C371 C372 C373	1-163-141-00	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.001MF	20% 5%	25V 50V 50V	C445 C446	1-163-809-11	CERAMIC CHIP 0.14 CERAMIC CHIP 0.04 CERAMIC CHIP 6PF		50V 25V PF 50V
C374 C375 C376	1-126-960-11 1-163-259-91 1-126-959-11	CERAMIC CHIP 220PF	20% 5% 20%	50V 50V	C447 C448 C449 C450	1-163-243-11 1-163-227-11	CERAMIC CHIP 3301 CERAMIC CHIP 47P CERAMIC CHIP 10P	5% 0.5P	
C377 C378 C379	1-163-809-11 1-163-809-11	CERAMIC CHIP 0.047MF CERAMIC CHIP 0.047MF CERAMIC CHIP 0.01MF	10%	25V 25V 50V	C450 C451 C452	1-164-004-11	CERAMIC CHIP 0.04 CERAMIC CHIP 0.1N CERAMIC CHIP 330	F 10%	25V 25V 50V
C380 C381 C382		CERAMIC CHIP 0.01MF CERAMIC CHIP 47PF	20%	16V 50V 50V	C453 C454 C455	1-163-243-11	CERAMIC CHIP 0.1N CERAMIC CHIP 47P CERAMIC CHIP 3300	5%	25V 50V 50V
C383 C384 C385	1-104-664-11	ELECT 47MF CERAMIC CHIP 82PF	20% 5% 20%	25V 50V 25V	C456 C457 C458	1-164-004-11	CERAMIC CHIP 6PF CERAMIC CHIP 0.1M CERAMIC CHIP 82P		PF 50V 25V 50V
C386 C387 C388	1-124-261-00 1-163-141-00 1-124-261-00	CERAMIC CHIP 0.001MF		50V 50V	C459 C460	1-165-319-11 1-164-004-11	CERAMIC CHIP 0.1M CERAMIC CHIP 0.1M	F F 10%	50V 25V
C389 C390	1-104-664-11		20% 20% 5%	50V 25V 50V	C461 C462 C463 C464	1-164-004-11 1-164-004-11	CERAMIC CHIP 1201 CERAMIC CHIP 0.1M CERAMIC CHIP 0.1M CERAMIC CHIP 0.22	F 10% F 10%	50V 25V 25V 25V
C391 C392 C393 C394		CERAMIC CHIP 0.15MF CERAMIC CHIP 0.15MF	20% 10% 10%	25V 25V 25V	C465	1-163-231-11 1-163-119-00	CERAMIC CHIP 15P. CERAMIC CHIP 1201	5% F 5%	50V 50V
C395 C396	1-163-235-11	ELECT 47MF CERAMIC CHIP 22PF CERAMIC CHIP 0.22MF	20% 5% 10%	25V 50V 25V	C467 C469 C470 C471	1-163-037-11 1-163-243-11	CERAMIC CHIP 1201 CERAMIC CHIP 0.02 CERAMIC CHIP 47PI CERAMIC CHIP 33PI	MF 10% 5%	50V 50V 50V 50V
C397 C398 C399 C400	1-104-664-11 1-104-664-11 1-104-664-11	ELECT 47MF ELECT 47MF ELECT 47MF	20% 20% 20%	25V 25V 25V	C472 C473	1-163-031-11 1-163-031-11	CERAMIC CHIP 0.01 CERAMIC CHIP 0.01	MF MF	50V 50V
C401 C402		CERAMIC CHIP 0.1MF CERAMIC CHIP 1MF ELECT 47MF	10%	25V 16V 50V	C475 C476 C477	1-163-031-11	CERAMIC CHIP 0.01 CERAMIC CHIP 0.01 CERAMIC CHIP 0.22	MF	50V 50V 25V
C403 C406 C407	1-164-232-11 1-126-965-11 1-104-664-11		10% 20% 20%	50V 50V 25V	C478 C479 C482	1-126-925-11	CERAMIC CHIP 1501 ELECT 4701	F 5% IF 20%	50V 50V 10V
C408 C409 C410		CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF ELECT 22MF	10% 20%	50V 50V 50V	C483 C484 C485	1-163-113-00	CERAMIC CHIP 82PI CERAMIC CHIP 68PI CERAMIC CHIP 68PI	5%	50V 50V
C411 C414 C415	1-164-004-11 1-163-031-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.01MF	10%	25V 50V	C486 C487 C490	1-163-249-11 1-163-235-11 1-164-336-11	CERAMIC CHIP 82PI CERAMIC CHIP 22PI CERAMIC CHIP 0.33	5% 5% MF	50V 50V 25V
C415 C416 C417 C418	1-164-232-11	ELECT 10MF CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF CERAMIC CHIP 0.0033M	20% 10% 10% F 10%	50V 50V 50V 50V	C491 C492 C493	1-164-336-11	CERAMIC CHIP 0.33 CERAMIC CHIP 0.33 CERAMIC CHIP 0.04	МF	25V 25V 50V
C419	1-126-925-11	ELECT 470MF	20%	10V	C493 C494 C495	1-164-005-11 1-126-964-11	CERAMIC CHIP 0.47	<b>MF</b>	25V 50V

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque  $\Delta$  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



REF. NO.	PART NO.	DESCRIPTION		ļ	REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
C496 C497		CERAMIC CHIP		5%	50V	C565 C566	1-126-960-11 1-137-150-11	MYLAR	1MF 0.01MF	20% 10%	50V 100V
C498	1-126-961-11	ELECT	2.2MF	20%	50V 50V	C567	1-136-499-11	FILM	0.047MF	5%	50V
C499 C500 C501	1-164-004-11 1-164-182-11	CERAMIC CHIP CERAMIC CHIP	0.1MF 0.0033MF		50V 25V 50V	C568 C569 C570 C571	1-126-767-11 1-164-232-11	TANTALUM ELECT CERAMIC CHIP	1MF 4.7MF 1000MF 0.01MF	20% 10% 20% 10%	50V 25V 16V 50V
C502 C503	1-163-251-11	CERAMIC CHIP	100PF	5% 5%	50V 50V	C572	1-104-709-11		4.7MF	0	160V
C504 C505 C506	1-136-495-11 1-163-199-00 1-126-959-11	<b>CERAMIC CHIP</b>	0.068MF 560PF 0.47MF	5% 5% 20%	50V 50V 50V	C573 C575 C576 C577	1-136-173-00 1-163-031-11 1-102-244-00 1-107-906-11	CERAMIC CHIP CERAMIC	0.47MF 0.01MF 220PF 10MF	5% 10% 20%	50V 50V 500V 50V
C507 C508	1-128-526-11 1-130-497-00		100MF 0.15MF	20% 5%	25V 50V	C578	1-136-112-00		1.4MF	5%	200V
C509 C511 C512	1-128-566-11 1-107-368-11 1-126-959-11	FILM	470MF 0.047MF 0.47MF	20% 10% 20%	100V 200V 50V	C579 C580 C581 C582	1-107-910-11 1-136-756-11 1-126-963-11 1-102-002-00	FILM ELECT	100MF 0.24MF 4.7MF 680PF	20% 5% 20% 10%	50V 200V 50V 500V
C513 C514 4	1-124-261-00 1-129-715-91		10MF 0.012MF	20% 10%	50V 630V	C583	1-136-828-11		1.8MF	5%	200V
C514 d	1-130-338-91		0.01MF	5% (14	4M4U/E/A) 630V 4M2U/E/A)	C584 C585 C586	1-107-949-11 1-107-960-11 1-126-942-61	ELECT	2.2MF 4.7MF 1000MF	20% 20% 20%	160V 250V 25V
C515 C516	1-163-809-11 1-102-030-00	CERAMIC CHIP CERAMIC	0.047MF 330PF	10% 10%	25V 500V	C587 C588	1-102-030-00 1-107-906-11		330PF 10MF	10% 20%	500V 50V
C517 C518 C519 C520	1-107-947-11 1-163-017-00 1-163-257-11	CERAMIC CHIP CERAMIC CHIP	220MF 0.0047MF 180PF	10% 20% 10% 5%	50V 160V 50V 50V	C589 C590 C591 C592	1-102-030-00 1-107-903-11 1-107-365-91 1-107-635-11	ELECT FILM	330PF 2.2MF 0.015MF 4.7MF	10% 20% 10% 20%	500V 50V 200V 160V
C521	1-162-114-00		0.0047MF		2KV	C593	1-165-319-11	CERAMIC CHIP	0.1MF		50V
C522 C523 C525 &	1-126-768-11 1-107-902-11 1-136-080-11	ELECT	2200MF 1MF 0.011MF	20% 20% 3%	16V 50V 2KV	C594 C595 C596	1-163-229-11 1-107-889-11 1-104-665-11		12PF 220MF 100MF	5% 20% 20%	50V 25V 25V
C525 A	1-136-079-11	FILM	0.01MF	3%	M4U/E/A) 2KV	C597 C598		CERAMIC CHIP CERAMIC CHIP	1MF		16V 16V
C526 A	1-162-116-91	CERAMIC	680PF	10%	IM2U/E/A) 2KV	C599	1-124-261-00	ELECT	10MF	20%	50V
C527	1-162-134-11	CERAMIC	470PF	10%	2KV	C1300 C1301	1-104-664-11 1-104-664-11	ELECT	47MF 47MF	20% 20%	25V 25V
C529 C530	1-107 <b>-</b> 901-11 1-104-666-11		0.47MF 220MF	20%	M2U/E/A) 50V 25V	C1302 C1304	1-163-133-00 1-104-664-11	CERAMIC CHIP ELECT	470PF 47MF	5% 20%	50V 25V
C531 C532	1-104-664-11		47MF	20% 20%	25V 50V	C1305 C1306		<b>CERAMIC CHIP</b>		20%	25V 50V
C533 C534 C537	1-102-212-00 1-107-662-11	ELECT	820PF 22MF	10% 20%	500V 250V	C1307 C1308 C1309	1-126-933-11	CERAMIC CHIP ELECT CERAMIC CHIP	100MF	20% 5%	50V 10V 50V
C538 C539	1-126-971-11 1-137-150-11 1-130-480-00	MYLAR	470MF 0.01MF 0.0056MF	20% 10% 5%	50V 100V 50V	C1310 C1311	1-104-664-11	CERAMIC CHIP ELECT	47MF	20%	50V 25V
C540 C541	1-163-133-00 1-107-905-11	CERAMIC CHIP ELECT	470PF 4.7MF	5% 20%	50V 50V	C1312 C1313 C1314	1-163-031-11 1-163-031-11 1-104-664-11	CERAMIC CHIP CERAMIC CHIP ELECT	0.01 MF 0.01 MF 47 MF	20%	50V 50V 25V
C542 C543	1-136-481-11 1-136-481-11	MYLAR	0.0022MF 0.0022MF		100V 100V	C1315	1-104-664-11	ELECT	47MF	20%	25V
C544	1-137-150-11		0.01MF	10%	100V	C1316 C1317	1-163-031-11 1-104-664-11	CERAMIC CHIP ELECT	0.01MF 47MF	20%	50V 25V
C545 C546		<b>CERAMIC CHIP</b>		10% 5%	500V 50V	C1318 C1319	1-104-664-11 1-163-037-11	ELECT CERAMIC CHIP	47MF 0.022MF	20% 10%	25V 50V
C547 C548	1-102-212-00		820PF	5% 10%	50V 500V	C1320	1-104-664-11		47MF	20%	25V
C549 C550	1-107-906-11 1-107-905-11		10MF 4.7MF	20%	50V	C1322	1-104-664-11 1-126-934-11	ELECT	47MF 220MF	20% 20%	25V 16V
C551 C552	1-106-375-12 1-107-889-11	MYLAR	0.022MF 220MF	20% 10% 20%	50V 100V 25V	C1323 C1324		CERAMIC CHIP CERAMIC CHIP			50V 50V
C553	1-106-389-00		0.082MF	10%	200V M4U/E/A)	C1325 C1326	1-163-031-11 1-104-664-11	CERAMIC CHIP	0.01MF 47MF	20%	50V 25V
C554	1-130-736-11		0.01MF	5%	50V	C1327 C1328	1-163-031-11	CERAMIC CHIP CERAMIC CHIP	0.01MF	20%	50V 50V
C555 C556	1-126-964-11 1-126-964-11	ELECT	10MF 10MF	20% 20%	50V 50V	C1329	1-126-964-11		10MF	20%	50V
C557 C558	1-106-381-12 1-126-960-11	ELECT	0.039MF 1MF	10% 20%	100V 50V	C1330 C1331	1-163-031-11 1-104-664-11	CERAMIC CHIP ELECT	0.01MF 47MF	20%	50V 25V
C559	1-136-173-00		0.47MF	5%	50V	C1332 C1333	1-104-664-11 1-104-664-11	ELECT ELECT	47MF 47MF	20% 20%	25V 25V
C561 C564	1-136-159-00 1-126-964-11		0.033MF 10MF	5% 20%	50V 50V	C1334	1-163-227-11	CERAMIC CHIP		0.5PF	50V



REF. NO.	PART NO.	DESCRIPTION		I	REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
C1335 C1336 C1338	1-104-664-11 1-104-664-11		47MF 47MF	20% 20%	25V 25V 50V	C1515	1-126-964-11		10MF	20%	50V
C1339 C1340	1-163-031-11	CERAMIC CHIP CERAMIC CHIP	0.01MF		50V 50V 50V	C1516 C1517 C1518	1-128-526-11 1-107-909-11	ELECT	100MF 47MF	10% 20% 20%	50V 10V 16V
C1341 C1342	1-163-105-00	CERAMIC CHIP	33PF	5% 5%	50V 50V	C1520 C1521	1-162-129-00 1-163-243-11	CERAMIC CHIP	150PF 47PF	10% 5%	2KV 14M4U/E/A) 50V
C1343 C1344 C1345		CERAMIC CHIP CERAMIC CHIP ELECT		5% 0.25PF 20%	50V 50V 50V	C1524	1-107-910-11	ELECT	100MF	20%	50V 14M4U/E/A)
C1346	1-124-589-11		47MF	20%	16V	C1525	1-162-114-00		0.0047MF		2KV 14M4U/E/A)
C1347 C1348 C1349 C1350	1-163-127-00 1-163-117-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	270PF 100PF	5% 5%	50V 50V 50V	C1530 C1537	1-130-783-00		0.33MF		50V 100V 14M4U/E/A)
C1351	1-104-232-11	CERAMIC CHIP	1MF	10% 20%	50V 50V	C1538 C2501	1-102-074-00	CERAMIC CHIP	0.001MF	10%	50V 50V
C1352 C1353 C1354 C1355	1-163-023-00 1-163-031-11 1-163-121-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.015MF 0.01MF 150PF	10% 5% 5%	50V 50V 50V 50V	C2502 C2510		CERAMIC CHIP		10% 5%	50V 630V (14M2U/E/A)
C1356 C1357	1-163-235-11 1-104-661-91	CERAMIC CHIP	22PF 330MF	5% 20%	50V	1 1 1		<connector></connector>			
C1358 C1359 C1360	1-124-589-11 1-163-263-11		47MF 330PF	20% 5%	16V 16V 50V 50V	CN101 CN102 CN104	*1-564-514-11	CONNECTOR, B PLUG, CONNEC PLUG, CONNEC	TOR 11P	BOAR	D 11P
C1362		CERAMIC CHIP		5%	50V	CN105 CN201	*1-565-503-11	CONNECTOR, B PLUG, CONNEC	OARD TO	BOAR	D 12P
C1363 C1364 C1365 C1366	1-163-133-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP ELECT	470PF	5% 5% 0.5PF 20%	50V 50V 50V 25V	CN301 CN302 CN303	* 1-564-510-11 * 1-766-745-11	PLUG, CONNEC PLUG, CONNEC CONNECTOR, B	TOR 7P OARD TO	BOAR	D 12P
C1367 C1369	1-104-664-11 1-163-237-11	ELECT CERAMIC CHIP	47MF 27PF	20% 5%	25V 50V	CN305 CN401		PIN, CONNECTO PLUG, CONNEC			
C1370 C1372 C1373		CERAMIC CHIP ELECT		5% 20% 20%	50V 25V 25V	CN402 CN501 CN502	*1-580-798-11 *1-573-964-11	PLUG, CONNECTOR PI PIN, CONNECTOR	N (DY) 6P OR (PC BO		
C1374 C1375	1-104-664-11 1-126-963-11		47MF 4.7MF	20% 20%	25V 50V	CN503 CN504		PIN, CONNECTO PLUG, CONNEC		ARD)	5P
C1378 C1380 C1381	1-163-163-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	18PF	5% 5% 5%	50V 50V 50V	CN505 CN507 CN508	1-695-915-11	PLUG, CONNEC TAB (CONTACT PIN, CONNECTO	")		
C1382 C1383	1-126-933-11 1-104-664-11	ELECT	100MF 47MF	20% 20%	10V 25V	# 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				(	14M4U/E/A)
C1384 C1385 C1386	1-163-031-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.01MF		25V 50V 50V	CP300	1-236-366-11	<composition< p=""> MODULE, TRAP</composition<>		BLOC	K>
C1387 C1388		CERAMIC CHIP CERAMIC CHIP		5%	50V 50V	CP301 CP302 CP303	1-808-654-21	MODULE, TRAP MODULE FILTER BLOCK,		P-4\	
C1393 C1400	1-163-251-11 1-163-031-11	CERAMIC CHIP CERAMIC CHIP	100PF 0.01MF	5%	50V 50V	Croos	1-400-102-01		COM (CF)	D-4)	
C1401 C1402	1-136-173-00	FILM CERAMIC CHIP	0.47MF	5%	50V 50V	D100	9-710-404-40	<diode></diode>			
C1403 C1404	1-136-173-00 1-164-299-11	FILM CERAMIC CHIP	0.47MF 0.22MF	5% 10%	50V 25V	D101 D102	8-719-800-76 8-719-800-76	DIODE 1SS226 DIODE 1SS226			
C1405 C1406		CERAMIC CHIP CERAMIC CHIP		5% 0.25PF	50V 50V	D103 D104		DIODE 1SV230T DIODE 1SS226	РН3		
C1407 C1408	1-163-113-00	CERAMIC CHIP	68PF	0.25PF 5%	50V	D105 D107	8-719-800-76	DIODE 1SS226 DIODE 1SS226			
C1500 C1501 C1505	1-126-768-11 1-126-925-11 1-136-165-00	ELECT	2200MF 470MF 0.1MF	20% 20% 5%	16V 10V 50V	D108 D109 D111	8-719-801-78	DIODE 1S2836 DIODE 1SS184 DIODE DTZ6.2			
C1506 C1507		CERAMIC CHIP		20% 5%	16V 50V	D114 D115	8-719-977-05	DIODE MA111 DIODE DTZ6.2			
C1508 C1509 C1510	1-126-963-11 1-126-964-11 1-126-963-11	ELECT	4.7MF 10MF 4.7MF	20% 20% 20%	50V 50V 50V	D116 D200 D300	8-719-977-46	DIODE MA111 DIODE DTZ13C DIODE 1SV232-7	грнз		
C1511 C1512	1-126-963-11		4.7MF	20%	50V 50V	D301 D303	8-719-977-05	DIODE MA111 DIODE DTZ6.2			
C1513 C1514	1-163-197-00 1-130-477-00	CERAMIC CHIP MYLAR	470PF 0.0033MF	5% 5%	50V 50V	D304 D305		DIODE 1SS184 DIODE 1SS226			



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARI
<b>D</b> 307	8-719-404-49	DIODE MA111	,	D516		DIODE MA111	
D308		DIODE MA111	9	D517 D518		DIODE MA111 DIODE MA111	
D309 D310	8-719-104-34	DIODE MA111 DIODE 1S2836	1 0 0	D519	8-719-404-49	DIODE MA111	
D311 D313		DIODE 1SV230TPH3 DIODE 1SS184		D520 D521		DIODE 1SS184 DIODE MA111	
D314		DIODE MA111	3 9 8 8	D522 D523		DIODE DTZ6.2 DIODE 1S2076	
D315 D317	8-719-404-49	DIODE MA111 DIODE MA111		D524	8-719-200-02	DIODE 10E-2	
D320 D322		DIODE MA111 DIODE MA111		D525 D526	8-719-200-02	DIODE 10E-2 DIODE MA111	
D323	8-719-404-49	DIODE MA111	3 3 9 9	D527 D528	8-719-200-02	DIODE 10E-2 DIODE RH-1A	
D324 D325		DIODE 1SV230TPH3 DIODE 1SS184		D529		DIODE 10E-2	
D326 D327	8-719-045-70	DIODE 1SV230TPH3 DIODE 1S2836		D530 D531	8-719-300-76	DIODE RH-1A DIODE DTZ11B	
D332	8-719-404-49	DIODE MAILI		D532 D533	8-719-800-76	DIODE 1SS226 DIODE EL1Z	
D333 D335	8-719-404-49	DIODE MAILI DIODE MAILI		D534		DIODE MA111	
D336 D337	8-719-404-49	DIODE MA111 DIODE MA111		D535 D536	8-719-404-49	DIODE MATTI DIODE MATTI DIODE 1SS226	
D338		DIODE MA111		D537 D538	8-719-800-76	DIODE 1SS226 DIODE 1SS226	
D339 D344	8-719-404-49	DIODE MA111 DIODE 1SS184		D539		DIODE 1S2076	
D345 D346	8-719-104-34	DIODE 1S2836 DIODE 1S2836		D540 D541	8-719-404-49	DIODE 132076 DIODE MA111 DIODE 1SS184	
D347		DIODE 1S2836	ļ	D542 D543	8-719-404-49	DIODE MA111 DIODE MA111	
D360 D361	1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP		D544			
D362 D363	8-719-158-40	DIODE RD10SB1 DIODE RD10SB1		D545 D546	8-719-404-49	DIODE MA111 (14M4U/E/A) DIODE MA111 (14M4U/E/A)	
D364		DIODE 1S2836		D547	8-719-404-49	DIODE V11N (14M4U/E/A) DIODE MA111	
D365 D381	8-719-404-49	DIODE MAI11 DIODE MAI11		D548	0-/19-11U <del>-4</del> 0	DIODE RD16ESB3 (14M4U/E/A)	
D401 D404	8-719-404-49	DIODE MA111 DIODE 1SS226				<delay line=""></delay>	
D405		DIODE 188184		DL300 DL301		DELAY LINE, Y	
D406 D407	8-719-404-49	DIODE MA111 DIODE MA111		DL401		DELAY LINE, Y DELAY LINE	
D408 D410		DIODE MA111 DIODE MA111				<ferrite bead=""></ferrite>	
D411		DIODE MAIII		FB501	1-410-396-41	FERRITE BEAD INDUCTOR 0.45	TEI
D414 D415	8-719-801-78	DIODE 1SS184 DIODE 1SS184		. 2001	1 410 330 41	LIMITE BEAD INDOCTOR 0.450	J11
D416 D417	8-719-801-78	DIODE 1SS184 DIODE 1SS184				<filter></filter>	
D418	8-719-801-78	DIODE 1SS184		FL300 FL401	1-236-547-11	TRAP, LC FILTER, BAND PASS	
D421 D422		DIODE MA111 DIODE MA111					
D423 D424		DIODE 1SS226 DIODE MA111	9 10 6 8 8			<ic></ic>	
D425	8-719-800-76	DIODE 1SS226		IC101 IC101	1-540-044-11	SOCKET, IC IC uPD78P018FYCW-M01	
D427 D500		DIODE MA111 DIODE MA111		IC102 IC103	8-759-354-28	IC ST24C02FM6TR IC MC74HC86F	
D501 D502		DIODE DTZ5.6B DIODE UF5406		IC104	8-759-262-59	IC uPD6451AGT-632-E2	
D503	8-719-404-49	DIODE MA111		IC105 IC106		IC M62358FP-E1 IC M62358FP-E1	
D504 D505		DIODE 1SS83 DIODE RGP02-17EL-6433	9 9 9	IC107 IC108	8-759-196-70 8-759-042-02	IC M62358FP-E1 IC S-80743AL-A7-S	
D506 D507		DIODE ERD07-15 DIODE 1SS226	8 8 9	IC109		IC M62358FP-E1	
D508	8-719-800-76	DIODE 1SS226	9 m m m m m m m m m m m m m m m m m m m	IC110 IC111		IC M62358FP-E1 IC MC14094BF	
D509 D510	8-719-302-43		9	IC112 IC200		IC ST24C01FM6TR	
D512 D513	8-719-979-80	DIODE UF5406 DIODE MA111	9 9 9	IC301		IC CXA1211M	
D514		DIODE ERC38-06	9 9 9	IC302 IC303	8-759-998-98 8-752-056-67	IC LM358D IC CXA1214P	
<b>D5</b> 15		DIODE ERC38-06	9 0 0 0	IC304 IC305		IC BU4053BCF	



Les composants identifies par une trame et une marque \(\hat{\Lambda}\) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark  $\Delta$  are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION REMARK
IC306	8-759-711-32	IC NJM2245M		L314 L316		INDUCTOR CHIP 27UH INDUCTOR CHIP 27UH
IC309 IC310 IC311	8-759-932-67	IC NJM2245M IC BU4053BCF IC MC14066BF		L317 L319		INDUCTOR 18mH INDUCTOR 100UH
IC312 IC313	8-759-711-32	IC NJM2245M IC MM1113XFF		L320 L401 L402	1-410-478-11	INDUCTOR 470UH INDUCTOR 47UH INDUCTOR CHIP 100UH
IC314 IC315	8-759-932-67	IC MM1113XFF IC BU4053BCF		L403 L404	1-410-216-31	INDUCTOR CHIP 100UH INDUCTOR CHIP 100UH
IC316 IC317 IC318	8-759-009-51	IC MM1111XF IC MC14538BF IC MC14584BF		L405 L406		INDUCTOR 68UH INDUCTOR 68UH
IC320 IC321		IC MM1113XFF IC MM1113XFF		L407 L408 L409	1-408-413-00	INDUCTOR 22UH INDUCTOR 22UH INDUCTOR CHIP 68UH
IC322 IC323	8-759-287-89 8-759-287-89	IC MM1113XFF IC MM1113XFF		L500	1-459-155-00	COIL (WITH CORE) 45UH COIL,CHOKE
IC324 IC325	8-759-287-89	IC MM1113XFF IC MM1113XFF		L501 L502 L503	1-407-365-00 1-410-093-11	COIL,CHOKE INDUCTOR 33mH
IC326 IC327 IC350	8-759-008-67	IC BA10324AF IC MC14066BF IC uPC4558G2		L504 L505		INDUCTOR 18UH INDUCTOR 47UH
IC401 IC402		IC BA7655AF-E2 IC CXA1211M		L506 L507 L508	1-416-239-11 1-410-686-11	COIL, CHOKE 3.00mH (14M4U/E/A) INDUCTOR 1mH INDUCTOR 27UH
IC403 IC404	8-759-008-67 8-752-067-05	IC MC14066BF IC CXA1739S		L509	1-459-075-11	COIL, DYNAMIC CONVERSION CHOKE
IC405 IC406	8-759-998-98			L511 L512 L513	Д 1-459-155-11	COIL(WITH CORE) COIL (WITH CORE) 45UH INDUCTOR 3.9mH
IC407 IC408 IC409	8-759-509-91	IC MC14066BF IC XRA10393F IC BA10324AF		L514 L515		COIL, DUST CORE COIL, DUST CORE
IC410 IC411	8-759-009-06	IC MC14052BF IC MC14024BF		L516 L517		COIL, HORIZONTAL LINEARITY INDUCTOR 680UH
IC412 IC413	8-759-932-67	IC BU4053BCF IC BU4053BCF				<neon lamp=""></neon>
IC500 IC502 IC503	8-759-009-51	IC H8D7248 IC MC14538BF IC MC14538BF		NL500	1-519-526-11	LAMP, NEON
IC504 IC505		IC CXA1211M IC XRA17812T		1		<transistor></transistor>
IC506 IC507	8-759-009-51 8-759-100-60	IC MC14538BF IC uPC1377C		Q101 Q102	8-729-216-22	TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SA1162-G
IC508 IC509	8-759-998-98			Q103 Q104 Q105	8-729-907-26	TRANSISTOR 2SA1162-G TRANSISTOR IMX1 TRANSISTOR DTA144EKA-T146
IC510	8-759-009-51	IC MC14538BF		Q107 Q108		TRANSISTOR DTA144EKA-T146 TRANSISTOR 2SD601A-S
JR302	1 214 205 01	<chip conductor=""></chip>		Q109 Q110	8-729-422-29 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S
JR307 JR310	1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		Q111 Q112	8-729-422-29	TRANSISTOR DTA144EKA-T146 TRANSISTOR 2SD601A-S
•		<coil></coil>		Q113 Q114 Q200	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD774-34
L101 L102		INDUCTOR 33UH INDUCTOR 47UH		Q201	8-729-422-29	TRANSISTOR 2SD601A-S
L104 L105	1-408-425-00 1-410-482-31	INDUCTOR 220UH INDUCTOR 100UH		Q300 Q301 Q302	8-729-422-29 8-729-216-22	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SA1162-G
L300 L301		INDUCTOR 47UH INDUCTOR 15UH		Q303 Q305		TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S
L302 L303 L304	1-412-008-31 1-408-416-00	INDUCTOR CHIP 15UH INDUCTOR 39UH INDUCTOR CHIP 15UH		Q306 Q307	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S
L305	1-410-196-11	INDUCTOR CHIP 2.2UH		Q308 Q309 Q310	8-729-422-37	TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R
L306 L307 L308	1-408-411-00 1-410-466-41	INDUCTOR 39UH INDUCTOR 15UH INDUCTOR 4.7UH		Q311 Q312		TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S
L309 L311	1-410-470-11	INDUCTOR 10UH INDUCTOR 10UH		Q313 Q314 Q315	8-729-422-37 8-729-027-38	TRANSISTOR 2SB709A-R TRANSISTOR DTA144EKA-T146 TRANSISTOR 2SB709A-R
L312	1-412-011-31	INDUCTOR CHIP 27UH			J . W. 7	AND



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q316 Q318 Q319 Q320 Q321	8-729-422-37 8-729-422-29 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q420 Q421 Q422 Q423 Q424	8-729-027-59 8-729-120-28 8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR DTC144EKA-T1- TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T1-	
Q322 Q323 Q324 Q325 Q326	8-729-027-59 8-729-027-59 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q425 Q426 Q428 Q429 Q430	8-729-027-59 8-729-422-37 8-729-422-37	TRANSISTOR DTC144EKA-T14 TRANSISTOR DTC144EKA-T14 TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S	
Q327 Q328 Q329 Q330 Q331	8-729-141-53 8-729-141-53 8-729-422-37	TRANSISTOR 2SB709A-R TRANSISTOR 2SK94-X2X3X4 TRANSISTOR 2SK94-X2X3X4 TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R		Q431 Q432 Q433 Q434 Q435	8-729-422-29 8-729-027-59 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T14 TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T14	
Q332 Q333 Q334 Q335 Q336	8-729-422-29 8-729-422-37 8-729-422-29	TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S TRANSISTOR 2SK94-X4		Q436 Q437 Q438 Q439 Q440	8-729-027-59 8-729-422-29 8-729-216-22	TRANSISTOR DTC144EKA-T14 TRANSISTOR DTC144EKA-T14 TRANSISTOR 2SD601A-S TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-S	
Q337 Q338 Q339 Q341 Q342	8-729-120-28 8-729-422-37 8-729-920-39	TRANSISTOR 2SD601A-S TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SB709A-R TRANSISTOR IMT1US TRANSISTOR IMT1US		Q441 Q442 Q443 Q444 Q445	8-729-422-29 8-729-216-22 8-729-422-29	TRANSISTOR 2SK94-X2X3X4 TRANSISTOR 2SD601A-S TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T14	<b>1</b> 6
Q343 Q345 Q346 Q347 Q348	8-729-422-29 8-729-422-29 8-729-027-59	TRANSISTOR IMT1US TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SB709A-R		Q446 Q447 Q448 Q449 Q500	8-729-027-59 8-729-027-59 8-729-027-59	TRANSISTOR DTC144EKA-T14 TRANSISTOR DTC144EKA-T14 TRANSISTOR DTC144EKA-T14 TRANSISTOR DTC144EKA-T14 TRANSISTOR 2SB709A-R	16 16
Q349 Q350 Q351 Q352 Q353	8-729-422-37 8-729-422-29 8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q501 Q502 Q505 Q506 Q507	8-729-119-80 8-729-422-29 8-729-422-29	TRANSISTOR 2SD1878-CA TRANSISTOR 2SC2688-LK TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	
Q354 Q355 Q356 Q357 Q358	8-729-422-29 8-729-027-59 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	i e	Q508 Q509 Q510 Q511 Q513	8-729-027-38 8-729-027-59 8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR DTA144EKA-T14 TRANSISTOR DTC144EKA-T14 TRANSISTOR 2SD601A-S TRANSISTOR 2SA1220A-P	46 46
Q359 Q360 Q361 Q362 Q363	8-729-907-26 8-729-027-38 8-729-422-29	7 TRANSISTOR 2SB709A-R 5 TRANSISTOR IMX1 8 TRANSISTOR DTA144EKA-T146 9 TRANSISTOR 2SD601A-S 9 TRANSISTOR 2SD601A-S	5	Q514 Q515 Q516 Q517 Q518	8-729-106-92 8-729-027-59 8-729-027-38	TRANSISTOR DTC124EK TRANSISTOR 2SC2690A-Q TRANSISTOR DTC144EKA-T14 TRANSISTOR DTA144EKA-T14 TRANSISTOR DTC144EKA-T14	16
Q364 Q366 Q367 Q368 Q369	8-729-422-37 8-729-422-37 8-729-422-37	7 TRANSISTOR DTC144EKA-T146 7 TRANSISTOR 2SB709A-R 7 TRANSISTOR 2SB709A-R 7 TRANSISTOR 2SB709A-R 8 TRANSISTOR DTA144EKA-T146		Q519 Q520 Q522 Q523 Q524	8-729-021-82 8-729-422-29 8-729-422-29	TRANSISTOR DTC144EKA-T14 TRANSISTOR 2SD2396K TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	16
Q372 Q401 Q402 Q403	8-729-422-29 8-729-422-29	TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146		Q525 Q526 Q527	8-729-020-07	TRANSISTOR 2SB709A-R TRANSISTOR 2SC4686A(LBSO TRANSISTOR 2SC4686A(LBSO	(14M4U/E/A)
Q404	8-729-422-37	TRANSISTOR 2SB709A-R		Q528	8-729-802-71	TRANSISTOR 2SA1407-D	(14M4U/E/A)
Q405 Q406 Q407 Q408 Q409	8-729-422-29 8-729-422-29 8-729-422-37	7 TRANSISTOR 2SB709A-R D TRANSISTOR 2SD601A-S D TRANSISTOR 2SD601A-S 7 TRANSISTOR 2SB709A-R 7 TRANSISTOR 2SB709A-R		Q529 Q530 Q531 Q532	8-729-027-59 8-729-216-22	TRANSISTOR DTC144EKA-T14 TRANSISTOR DTC144EKA-T14 TRANSISTOR 2SA1162-G (14M TRANSISTOR IRF520 (14M4U/I	16 4U/E/A)
Q410 Q411	8-729-422-29	TRANSISTOR IMX1 TRANSISTOR 2SD601A-S				<resistor></resistor>	
Q412 Q413 Q414	8-729-141-53	2 TRANSISTOR 2SA1162-G 3 TRANSISTOR 2SK94-X2X3X4 7 TRANSISTOR 2SB709A-R		R101 R102		METAL GLAZE 100 5% METAL GLAZE 100 5%	1/10W 1/10W
Q415 Q416 Q417	8-729-422-37	7 TRANSISTOR 2SB709A-R 7 TRANSISTOR 2SB709A-R 7 TRANSISTOR 2SB709A-R		R103 R104 R105	1-216-025-91 1-216-073-00	METAL GLAZE 100 5% METAL GLAZE 10K 5% METAL GLAZE 2.7K 5%	1/10W 1/10W 1/10W
Q418 Q419	8-729-120-28	3 TRANSISTOR 2SC1623-L5L6 7 TRANSISTOR 2SB709A-R		R106 R107		METAL GLAZE 4.7K 5% METAL GLAZE 4.7K 5%	1/10W 1/10W



REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
R108 R109 R110	1-216-065-00	METAL GLAZE 4.7K METAL GLAZE 4.7K METAL GLAZE 10K	5% 5% 5%	1/10W 1/10W 1/10W	R315 R316 R317	1-216-049-91	METAL GLAZE 1 METAL GLAZE 1 METAL GLAZE 2	1K 59	% 1/10W
R113	1.216 095 00	METAL GLAZE 33K	5%	1/10W	R318	1-216-049-91	METAL GLAZE 1	IK 59	% 1/10W
R117		METAL GLAZE 33K	5%	1/10W 1/10W	R319	1-216-067-00	METAL GLAZE 5	5.6K 59	% 1/10W
R119 R124		METAL GLAZE 10K	5%	1/10W	R320		METAL GLAZE 2	2.2K 59	% 1/10W
R124 R130		CONDUCTOR, CHIP METAL GLAZE 120K	5%	1/10W	R321 R322		METAL GLAZE 1 METAL GLAZE 2		
D122	1 214 045 00	METAL CLATE ATV	F.01	1/1007	R323		METAL GLAZE 3		
R132 R133		METAL GLAZE 4.7K METAL GLAZE 56K	5% 5%	1/10W 1/10W	R324	1-216-101-00	METAL GLAZE 1	150K 59	% 1/10W
R134	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W	R325	1-216-037-00	METAL GLAZE 3	330 59	% 1/10W
R135 R137		METAL GLAZE 33K METAL GLAZE 4.7K	5% 5%	1/10W 1/10W	R326 R328		METAL GLAZE 2 METAL GLAZE 1		
					R329		METAL GLAZE 1		
R140 R141		METAL GLAZE 220 METAL GLAZE 33K	5% 5%	1/10W 1/10W	R330	1-216-089-91	METAL GLAZE 4	47K 59	% 1/10W
R144	1-216-295-91	CONDUCTOR, CHIP			R331	1-216-093-00	METAL GLAZE 6	58K 59	% 1/10W
R149 R151		METAL GLAZE 4.7K METAL GLAZE 3.3K	5% 5%	1/10W 1/10W	R332 R333		METAL GLAZE 1 METAL GLAZE 1		
					R334		METAL GLAZE		
R154 R155		METAL GLAZE 4.7K METAL GLAZE 27K	5% 5%	1/10W 1/10W	R335	1-216-083-00	METAL GLAZE 2	27K 59	% 1/10W
R157	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W	R336		METAL GLAZE 4		
R158 R159		CONDUCTOR, CHIP METAL GLAZE 3.9K	5%	1/10W	R337 R338		METAL GLAZE 1 METAL GLAZE 5		
				1/10 W	R339		METAL GLAZE 8		
R160 R162		METAL GLAZE 3.3K METAL GLAZE 4.7K	5% 5%	1/10W 1/10W	R340	1 216 000 01	METAL CLAZE	1917 61	* 110***
R163		METAL GLAZE 4.7K	5%	1/10W	R341		METAL GLAZE 4 METAL CHIP 8		% 1/10W 50% 1/10W
R164 R165		METAL GLAZE 5.6K CONDUCTOR, CHIP	5%	1/10W	R342		METAL GLAZE 4		% 1/10W
KIOJ	1-210-295-91	CONDUCTOR, CHIP			R343 R344		METAL GLAZE 8 METAL GLAZE 1		
R167 R168		METAL GLAZE 3.3K METAL GLAZE 33K	5% 5%	1/10W 1/10W	R345				
R169		METAL GLAZE 270K	5%	1/10W	R346		METAL GLAZE 3 METAL GLAZE 2		
R171 R172		METAL GLAZE 180 CONDUCTOR, CHIP	5%	1/10W	R347 R348		METAL GLAZE		% 1/10W
RITZ	1-210-293-91	CONDUCTOR, CHIP			R349		METAL GLAZE 1 METAL CHIP 6		% 1/10W 50% 1/10W
R177 R181		METAL GLAZE 4.7K METAL GLAZE 4.7K	5% 5%	1/8W 1/10W	B250	1 214 005 00	METAL CLASE A		
R184		METAL CHIP 820	0.50%		R350 R351		METAL GLAZE 3 METAL GLAZE 3		
R185 R187		METAL GLAZE 10K METAL GLAZE 3.3K	5% 5%	1/10W 1/10W	R352			10K 0.	50% 1/10W
			370	1/10W	R353 R354		METAL GLAZE 1 METAL GLAZE 1		
R189 R190		METAL GLAZE 10K METAL GLAZE 1K	5% 5%	1/10W 1/10W	R355	1 216 050 00	METAL GLAZE 2		
R192		METAL GLAZE 10K	5%	1/10W	R356		METAL GLAZE 2		
R195 R197		METAL GLAZE 8.2K METAL GLAZE 3.3K	5% 5%	1/10W 1/10W	R357 R358		METAL GLAZE 1		% 1/10W
			370	1/10**	R359		METAL GLAZE 1 METAL GLAZE 4		
R199 R200		CONDUCTOR, CHIP METAL CHIP 30K	0.50%	1/10W	R360	1 216 020 00	METAL GLAZE 3	390 59	1/1011
R201	1-216-049-91	METAL GLAZE 1K	5%	1/10W	R361	1-216-017-91	METAL GLAZE 3	17 59	
R202 R203	1-212-857-00 1-260-095-11		5% 5%	1/4W F 1/2W	R362 R363		METAL GLAZE 5 METAL GLAZE 4		
					R364		METAL GLAZE 4		
R204 R205	1-260-072-11	CARBON 4.7 METAL CHIP 680	5% 0.50%	1/2W 1/10W	R366	1-216-065-00	METAL GLAZE 4	1.7K 59	z 1/10W
R206	1-216-073-00	METAL GLAZE 10K	5%	1/10W	R367		METAL GLAZE 1		
R207 R208		METAL GLAZE 4.7K METAL GLAZE 4.7K	5% 5%	1/10W 1/10W	R368 R371		METAL GLAZE 1 METAL GLAZE 6		
					R372		METAL GLAZE 1		
R209 R210		METAL GLAZE 10K METAL GLAZE 3.3K	5% 5%	1/10W 1/10W	R373	1.216.645.11	METAL CHIP 5	560 0.:	E001. 1/10W
R211	1-249-393-11	CARBON 10	5%	1/4W F	R374				50% 1/10W 50% 1/10W
R237 R301		METAL GLAZE 47K METAL GLAZE 100	5% 5%	1/10W 1/10W	R375 R376		METAL GLAZE 1 METAL GLAZE 3		6 1/10W
					R378		METAL GLAZE 5		
R302 R303		METAL GLAZE 100 METAL GLAZE 100	5% 5%	1/10W 1/10W	R379		METAL GLAZE 6		
R304	1-216-025-91	METAL GLAZE 100	5%	1/10W	R380	1-216-065-00	<b>METAL GLAZE 4</b>	1.7K 59	
R305 R306		CONDUCTOR, CHIP			R381 R382		METAL GLAZE 3 METAL GLAZE 1	9K 59	6 1/10W
					R383		METAL GLAZE 1		
R307 R308		METAL GLAZE 560K METAL GLAZE 4.7K	5% 5%	1/10W 1/10W	R384	1-216-073-00	METAL GLAZE 1	OK 59	6 1/10W
R311	1-216-055-00	METAL GLAZE 1.8K	5%	1/10W	R385	1-216-065-00	<b>METAL GLAZE 4</b>	1.7K 59	6 1/10W
R312 R313		METAL GLAZE 10K METAL CHIP 750	5% 0.50%	1/10W 1/10W	R386 R387		METAL GLAZE 5 METAL GLAZE 1		
					R388		METAL GLAZE 3		
R314	1-210-099-00	METAL GLAZE 120K	5%	1/10W	•				



REF. NO.	PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION		R	EMARK	
R389	1_216_640_11	METAL CHIP	820	0.50%	1/10W	R464	1 216 065 00	METAL CLATE	4 77	F.01	1 /1 0337	•
R390	1-249-393-11		10	0.30% 5%	1/4W F	R465		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	
R391		METAL GLAZE		5%	1/10W	R466		METAL GLAZE		5%	1/10W	
R393		METAL GLAZE		5%	1/10W					- /-		
R394	1-216-083-00	METAL GLAZE	27K	5%	1/10W	R467		METAL GLAZE		5%	1/10W	
R395	1-216-651-11	METAL CHIP	1K	0.50%	1/10W	R468 R469		METAL GLAZE		5%	1/10W	
R396		METAL GLAZE		5%	1/10W	R470	1-216-063-91	METAL GLAZE METAL GLAZE	5.9K	5% 5%	1/10W 1/10W	
R397		METAL GLAZE		5%	1/10W	R471		METAL GLAZE		5%	1/10W	
R398		METAL GLAZE		5%	1/10W							
R399	1-216-111-91	METAL GLAZE	390K	5%	1/10W	R472		METAL GLAZE		5%	1/10W	
R400	1-216-113-00	METAL GLAZE	470K	5%	1/10W	R473 R474		METAL GLAZE METAL CHIP	820	5% 0.50%	1/10W 1/10W	
R401		METAL GLAZE		5%	1/10W	R475		METAL GLAZE		5%	1/10W	
R402		METAL GLAZE		5%	1/10W	R476		<b>METAL GLAZE</b>		5%	1/10W	
R403 R404		METAL GLAZE		5%	1/10W	D 477	1 01/ 0/1 00	1. CT			4 44 0000	
1404	1-210-029-00	METAL GLAZE	130	5%	1/10W	R477 R478		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	
R406	1-216-083-00	METAL GLAZE	27K	5%	1/10W	R479		METAL GLAZE		5%	1/10W	
R407	1-216-077-00	METAL GLAZE	15K	5%	1/10W	R480		METAL GLAZE		5%	1/10W	
D 407	1 016 005 00	METAL CLASE	227		M2U/E/A)	R481	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R407	1-210-083-00	METAL GLAZE	33K	5%	1/10W M4U/E/A)	R482	1.216.057.00	METAL GLAZE	2.25	5%	1/1/33/	
R408	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	R483		METAL GLAZE		5%	1/10W 1/10W	
R410		<b>METAL GLAZE</b>		5%	1/10W	R484		METAL CHIP	1K	0.50%	1/10W	
D 444	1 01 / 000 00					R485		METAL GLAZE		5%	1/10W	
R411 R412		METAL GLAZE METAL GLAZE		5%	1/10W	R486	1-216-681-11	METAL CHIP	18K	0.50%	1/10W	
R413		METAL CHIP	5.1K	5% 0.50%	1/10W 1/10W	R487	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	
R414		METAL CHIP	3K	0.50%		R488		METAL GLAZE		5%	1/10W	
					M2U/E/A)	R489	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R416	1-216-113-00	METAL GLAZE	470K	5%	1/10W	R490		METAL GLAZE		5%	1/10W	
R417	1-216-665-11	METAL CHIP	3.9K	0.50%	1/10W	R491	1-210-001-00	METAL GLAZE	3.3K	5%	1/10W	
R418		METAL CHIP	4.7K	0.50%	1/10W	R492	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R419		METAL GLAZE		5%	1/10W	R493	1-216-295-91	CONDUCTOR, C				
R420 R422		METAL GLAZE		5%	1/10W	R494		METAL CHIP	75K	0.50%	1/10W	
R422	1-210-073-00	METAL GLAZE	IUK	5%	1/10W	R495 R496		METAL CHIP METAL GLAZE	1K	0.50% 5%	1/10W 1/10W	
R423	1-216-073-00	<b>METAL GLAZE</b>	10K	5%	1/10W	K470	1-210-075-00	METAL GLALE	IVA	370	1/10**	
R424		METAL GLAZE		5%	1/10W	R497		METAL CHIP	1.2K	0.50%	1/10W	
R425		METAL GLAZE		5%	1/10W	R498		METAL GLAZE		5%	1/10W	
R426 R427		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R499 R500		METAL GLAZE METAL GLAZE		5% 5%	1/10W	
24-27	1-210-055-00	METAL OLIVEE	220	570	1/10/11	R501		METAL GLAZE		5%	1/10W 1/10W	
R428		METAL GLAZE		5%	1/10W					•		
R429		METAL GLAZE		5%	1/10W	R502		METAL CHIP	12K	0.50%	1/10W	
R430 R431		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R503 R504		METAL CHIP METAL GLAZE	12K	0.50%	1/10W	
R432		METAL GLAZE		5%	1/10W	R505		METAL GLAZE		5% 5%	1/10W 1/10W	
						R506		METAL GLAZE		5%	1/10W	
R434		METAL GLAZE		5%	1/10W	'n con	1 01 / 000 00					
R435 R436		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R507 R508		METAL GLAZE METAL GLAZE		5%	1/10W	
R437		METAL GLAZE		5%	1/10W	R509	1-216-089-91	METAL GLAZE	47K	5% 5%	1/10W 1/10W	
R438	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	R510	1-216-097-91	<b>METAL GLAZE</b>	100K	5%	1/10W	
R439	1.016.000.00	METAL OLATE	220	50	1/1033	R511	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R439 R440		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R512	1-216-055-00	METAL GLAZE	1 91	5%	1/10W	
R441		METAL CHIP	560	0.50%	1/10W	R513		CONDUCTOR, C		J 70	1/10W	
R442	1-216-647-11	METAL CHIP	680	0.50%	1/10W	R514	1-216-295-91	CONDUCTOR, C				
R443	1-216-049-91	METAL GLAZE	1 <b>K</b>	5%	1/10W	R515		METAL CHIP	10K	0.50%	1/10W	
R444	1-216-105-91	METAL GLAZE	220K	5%	1/10W	R516	1-210-103-00	METAL GLAZE	180K	5%	1/10W	
R445		METAL GLAZE		5%	1/10W	R517	1-214-888-00	METAL	10K	1%	1/2W	
R447	1-216-069-00	<b>METAL GLAZE</b>	6.8K	5%	1/10W	R518	1-260-123-11		100K	5%	1/2W	
R448		METAL GLAZE		5%	1/10W	R519		METAL GLAZE		5%	1/10W	
R449	1-210-073-00	METAL GLAZE	IUK	5%	1/10W	R520 R521	1-249-423-11	CARBON METAL GLAZE	3.3K	5%	1/4W	F
R450	1-216-121-91	METAL GLAZE	1M	5%	1/10W	1.721	1-210-003-00	MICIAL GLAZE	4./1	5%	1/10W	
R451	1-216-037-00	<b>METAL GLAZE</b>	330	5%	1/10W	R523	1-215-892-11	METAL OXIDE	1K	5%	2W	F
R452			1K	0.50%	1/10W	R524	1-216-093-00	<b>METAL GLAZE</b>	68K	5%	1/10W	
R453 R455		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R525 R526		METAL GLAZE		5%	1/10W	
A(-7J)	1-210-005-00	WILL OLACE	JJR	3 10	1/1044	R526 R527		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	
R456		METAL GLAZE		5%	1/10W	3.00 F	- 2.0 005-71	OURLE	774%	3 70	47 TO W	
R457		METAL GLAZE		5%	1/10W	R528		METAL GLAZE		5%	1/10W	
R458 R459		METAL GLAZE METAL CHIP	470K 820	5% 0.50%	1/10W 1/10W	R529 R530		METAL GLAZE		5%	1/10W	
R460		CONDUCTOR, C		0.5070	711044	R531		METAL OXIDE METAL GLAZE		5% 5%	2W 1/10W	F
		•				R532		METAL OXIDE		5%		F
R462		METAL CHIP	1K	0.50%	1/10W	D 522	1 047 700 5	CARROSS				_
R463	1-210-003-00	METAL GLAZE	4./K	5%	1/10W 3	R533	1-247-723-71	CARBON	6.8K	5%	1/4W	F



REF. NO.	PART NO.	DESCRIPTION		F	REMARK ;	REF. NO.	PART NO.	DESCRIPTION		R	EMARK
R534	1-216-085-00	METAL GLAZE	33K	5%	1/10W	R599	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R535	1-249-448-11	CARBON	1.2	5%	1/4W F						
R536 R537		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1103 R1104		METAL GLAZE METAL CHIP	15K 100K	5% 0.50%	1/10W 1/10W
	1-210-005-51	METAL GLALL	4724	570		R1105		METAL GLAZE		5%	1/10W
R539 R540		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1106 R1107		METAL GLAZE		5%	1/10W
R541	1-249-383-11		1.5	5%	1/4W F	KIIU/	1-210-039-00	METAL GLAZE	2./K	5%	1/10W
R542 R543		METAL GLAZE	2.2K 120	5%	1/10W	R1108 R1111		METAL CHIP	18K	0.50%	1/10W
K343	1-212-883-00	PUSIBLE	120	5%	1/4W F	R1112		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R544		METAL GLAZE		5%	1/10W	R1113		METAL GLAZE		5%	1/10W
R545 R546	1-249-425-11	METAL GLAZE CARBON	4.7K	5% 5%	1/10W 1/4W F	R1114	1-210-049-91	METAL GLAZE	1K	5%	1/10W
R547		METAL GLAZE		5%	1/10W	R1115		METAL GLAZE		5%	1/10W
R548	1-210-057-00	METAL GLAZE	2.2K	5%	1/10W	R1116 R1117		METAL CHIP METAL GLAZE	12K 6.8K	0.50% 5%	1/10W 1/10W
R549		METAL CHIP	12K	0.50%	1/10W	R1118	1-216-113-00	<b>METAL GLAZE</b>	470K	5%	1/10W
R550 R551		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1119	1-210-094-11	METAL CHIP	62K	0.50%	1/10W
R552	1-216-033-00	<b>METAL GLAZE</b>	220	5%	1/10W	R1120		METAL GLAZE		5%	1/10W
R553	1-216-083-00	METAL GLAZE	2/K	5%	1/10W	R1123 R1124		METAL GLAZE		5% 5%	1/10W 1/10W
R554		METAL GLAZE		5%	1/10W	R1125	1-216-049-91	<b>METAL GLAZE</b>	1K	5%	1/10W
R555 R556		METAL CHIP METAL OXIDE	51K 12K	0.50% 5%	1/10W 2W F	R1126	1-216-041-00	METAL GLAZE	470	5%	1/10W
R558	1-215-868-00	METAL OXIDE	680	5%	1W F	R1128		METAL GLAZE		5%	1/10W
R559	1-216-105-91	METAL GLAZE	220K	5% (14	1/10W 4M2U/E/A)	R1129 R1130		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
						R1131	1-216-049-91	<b>METAL GLAZE</b>	1K	5%	1/10W
R559	1-216-109-00	METAL GLAZE	330K	5%	1/10W 4M4U/E/A)	R1132	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R560		METAL GLAZE		5%	1/10W	R1133		METAL GLAZE		5%	1/10W
R561 R562	1-216-049-91 1-247-696-11	METAL GLAZE	1K 47	5% 5%	1/10W 1/4W F	R1134 R1136		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
	1-247-090-11	CARBON	71		4M4U/E/A)	R1137		METAL GLAZE		5%	1/10W
R563	1-216-017-91	METAL GLAZE	47	5%	1/10W	R1138	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R564	1-216-107-00	METAL GLAZE	270K	5%	1/10W	R1139	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R565 R566		METAL GLAZE METAL CHIP	220 27K	5%	1/10W 1/10W	R1140 R1141		METAL CHIP METAL GLAZE	1.2K	0.50% 5%	1/10W 1/10W
	1-210-065-11	METAL CHIP		(14	4M2U/E/A)			METAL CHIP	1.2K	0.50%	1/10W
R566	1-216-691-11	METAL CHIP	47K		1/10W 4M4U/E/A)	R1143	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R567	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R1144		METAL GLAZE		5%	1/10W
R568	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R1145 R1146		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R569	1-260-114-11	CARBON	18K	5%	1/2W	R1147	1-216-057-00	<b>METAL GLAZE</b>	2.2K	5%	1/10W
R571 R572		METAL GLAZE		5% 5%	1/10W 1/10W	R1150	1-216-037-00	METAL GLAZE	330	5%	1/10W
R573		METAL GLAZE		5%	1/10W	R1151		METAL GLAZE		5%	1/10W
R574	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R1155 R1161		METAL GLAZE METAL CHIP	3.3M 1M	5% 0.50%	1/10W 1/10W
				(14	4M4U/E/A)	R1162	1-218-768-11	<b>METAL CHIP</b>	470K		1/10W
R575 R576	1-249-383-11	CARBON METAL GLAZE	1.5 150K	5% 5%	1/4W F 1/10W	R1163	1-216-033-00	METAL GLAZE	220	5%	1/10W
R577		METAL GLAZE		5%	1/10W	R1164		METAL GLAZE		5%	1/10W
R578	1-216-693-11	METAL CHIP	56K	0.50%	4M4U/E/A) 1/10W	R1165 R1167		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
						R1168	1-216-097-91	<b>METAL GLAZE</b>	100K	5%	1/10W
R580 R581		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1169	1-216-097-91	METAL GLAZE	100K	5%	1/10W
				(14	4M4U/E/A)	R1170		METAL GLAZE		5%	1/10W
R582 R583		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1171 R1172		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R584		METAL GLAZE		5%	1/10W	R1173	1-216-295-91	CONDUCTOR, C	CHIP		
R585	1-216-033-00	METAL GLAZE	220	5%	1/10W	R1174	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R586	1-216-686-11	METAL CHIP	30K	0.50%	1/10W	R1177		METAL GLAZE		5%	1/10W
R587 R588		METAL CHIP METAL GLAZE	10K	0.50% 5%	1/10W 1/10W	R1179 R1180		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R589		METAL GLAZE		5%	1/10W	R1182	1-216-131-11	<b>METAL GLAZE</b>	2.7M	5%	1/10W
R590	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R1183	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R591	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	R1184		METAL GLAZE		5%	1/10W
R592 R593	1-247-688-11 1-216-647-11	CARBON METAL CHIP	10 680	5% 0.50%	1/4W F 1/10W	R1185 R1186		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R594	1-260-104-91		2.7K	5%	1/2W	R1187	1-216-071-00	<b>METAL GLAZE</b>	8.2K	5%	1/10W
R595	1-216-689-11	METAL GLAZE	39K	5%	1/10W	R1188	1-216-131-11	METAL GLAZE	2.7M	5%	1/10W
R596	1-214-754-00	METAL	11K	1%	1/4W	R1189		METAL GLAZE		5%	1/10W
R597 R598	1-249-417-11 1-216-085-00	CARBON METAL GLAZE	1K 33K	5% 5%	1/4W F 1/10W	R1190 R1191		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
	000 00						071.00		J. 22	5 70	111011



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			DEMARK
	**********		0.534	-				DESCRIPTION		•	REMARK
R1192 R1193	1-216-025-91	METAL GLAZE METAL GLAZE	100	5% 5%	1/10W 1/10W	R1365 R1366 R1367	1-216-081-00	METAL GLAZE METAL CHIP		5% 5% 0.50%	1/10W 1/10W 1/10W
R1194 R1195		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1368	1-216-059-00	METAL GLAZE	2 7K	5%	1/10W
R1196	1-216-085-00	METAL GLAZE	33K	5%	1/10W	R1369	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R1197 R1198		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1370 R1371		METAL GLAZE METAL GLAZE		5%	1/10W
	1-210-005-00	METAL OLALL	JJIK .	3 10	1710**	R1372		METAL GLAZE		5% 5%	1/10W 1/10W
R1301 R1302		METAL GLAZE METAL GLAZE		5%	1/10W	D1222	1 016 060 01	AFFRAY OF LOW			
R1303		METAL GLAZE		5% 5%	1/10W 1/10W	R1373 R1374		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R1304	1-216-689-11	<b>METAL GLAZE</b>	39K	5%	1/10W	R1375	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R1305	1-216-033-00	METAL GLAZE	220	5%	1/10W	R1376 R1377		METAL CHIP METAL GLAZE	680	0.50%	1/10W
R1306		METAL CHIP	560	0.50%	1/10W	10177	1-210-055-00	METAL OLAZE	1.0K	5%	1/10W
R1307 R1308		METAL GLAZE METAL CHIP	56K 560	5% 0.50%	1/10W 1/10W	R1378		METAL GLAZE		5%	1/10W
R1309		METAL CHIP		5%	1/10W	R1379 R1380		METAL GLAZE METAL CHIP	560	5% 0.50%	1/10W 1/10W
R1311	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R1381	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R1312	1-216-027-00	METAL GLAZE	120	5%	1/10W	R1382	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1313	1-216-097-91	<b>METAL GLAZE</b>	100K	5%	1/10W	R1383		METAL CHIP	18K	0.50%	1/10W
R1314 R1315		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1384 R1385		METAL GLAZE		5%	1/10W
R1316		METAL GLAZE		5%	1/10W	R1386		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R1317	1 216 022 00	METAL OLAZE	220	8.01	1/1033	R1387		METAL CHIP	1.2K	0.50%	1/10W
R1317		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1388	1-216-689-11	METAL CHIP	39K	0.50%	1/10W
R1319	1-216-085-00	<b>METAL GLAZE</b>	33K	5%	1/10W	R1389	1-216-658-11	METAL CHIP	2K	0.50%	1/10W
R1320 R1321		METAL GLAZE METAL CHIP	2.2K 820	5% 0.50%	1/10W 1/10W	R1390 R1391		METAL CHIP METAL GLAZE	680	0.50%	1/10W
						R1392		METAL GLAZE		5% 5%	1/10W 1/10W
R1322 R1324		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1393	1 216 062 01	METAL OLATE	2.01/		1 /1 0317
R1325		METAL CHIP	1.1K	0.50%	1/10W	R1393		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R1326 R1327		METAL GLAZE METAL GLAZE		5%	1/10W	R1395		METAL GLAZE		5%	1/10W
K1321	1-210-073-00	METAL GLAZE	IUK	5%	1/10W	R1396 R1397		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R1328 R1329		METAL GLAZE		5%	1/10W						
R1330		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1399 R1401		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R 1331	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	R1402	1-216-295-91	CONDUCTOR, C		370	171011
R1332	1-210-0/1-11	METAL CHIP	6.8K	0.50%	1/10W	R1403 R1404		METAL CHIP METAL CHIP	1K 18K	0.50%	1/10W 1/10W
R1333		METAL GLAZE		5%	1/10W					0.50%	
R1334 R1335	1-249-401-11	METAL GLAZE CARBON	3.9K 47	5% 5%	1/10W 1/4W F	R1405 R1406		METAL GLAZE METAL CHIP	8.2K 1.2K	5% 0.50%	1/10W 1/10W
R1336	1-216-095-00	<b>METAL GLAZE</b>	82K	5%	1/10W	R1407	1-216-061-00	<b>METAL GLAZE</b>	3.3K	5%	1/10W
R1337	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	R1408 R1409		METAL GLAZE CONDUCTOR, C		5%	1/10W
R 1338		METAL CHIP	680	0.50%	1/10W			,			
R1339 R1340		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1410 R1411		METAL GLAZE METAL GLAZE		5%	1/10W
R1341	1-216-033-00	<b>METAL GLAZE</b>	220	5%	1/10W	R1412	1-216-107-00	METAL GLAZE	270K	5% 5%	1/10W 1/10W
R1342	1-216-083-00	METAL GLAZE	27K	5%	1/10W	R1413 R1414		METAL GLAZE		5%	1/10W
R1343		METAL GLAZE		5%	1/10W	W1414	1-210-03/-00	METAL GLAZE	2.2K	5%	1/10W
R1344 R1345		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1415 R1416		METAL GLAZE		5%	1/10W
R1346		METAL GLAZE		5%	1/10W	R1417		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R1347	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R1418	1-216-033-00	METAL GLAZE	220	5%	1/10W
R1348	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	R1419	1-210-023-91	METAL GLAZE	100	5%	1/10W
R1349	1-216-035-00	<b>METAL GLAZE</b>	270	5%	1/10W	R1420		METAL GLAZE		5%	1/10W
R1350 R1351		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1421 R1422		METAL CHIP METAL GLAZE	820 33K	0.50% 5%	1/10W 1/10W
R1352		METAL GLAZE		5%	1/10W	R1423	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1353	1-216-065-00	METAL GLAZE	47K	5%	1/10W	R1424	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1354	1-216-089-91	<b>METAL GLAZE</b>	47K	5%	1/10W	R1425	1-216-013-00	METAL GLAZE	33	5%	1/10W
R1355 R1356		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1426		METAL GLAZE		5%	1/10W
R1357		METAL GLAZE		5% 5%	1/10W 1/10W	R1427 R1428		METAL CHIP METAL GLAZE	18K 3.3K	0.50% 5%	1/10W 1/10W
R1358		METAL GLAZE				R1429			5.1K	0.50%	1/10W
R1359		METAL GLAZE		5% 5%	1/10W 1/10W	R1430	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1360	1-216-065-00	<b>METAL GLAZE</b>	4.7K	5%	1/10W	R1431	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W
R1361 R1362		METAL GLAZE METAL CHIP	470K 11K	5% 0.50%	1/10W 1/10W	R1432 R1433		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
					i	R1434			560	0.50%	1/10W
R1363 R1364		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1435	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W



Les composants identifies par une trame et une marque ∆ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION		F	REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R1436	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R1508	1-216-083-00	METAL GLAZE	27V	5%	1/10W
R1437		METAL GLAZE		5%	1/10W	R1509		METAL GLAZE		5%	1/10W
R1438		METAL GLAZE		5%	1/10W	R1510		METAL GLAZE		5%	1/10W
R1439		<b>METAL GLAZE</b>		5%	1/10W	R1511		METAL OXIDE		5%	1W F
						R1512		METAL CHIP	680	0.50%	1/10W
R1440		METAL GLAZE		5%	1/10W						2,00
R1441		METAL GLAZE		5%	1/10W	R1513	1-247-752-11		1K	5%	1/2W F
R1442		METAL GLAZE		5%	1/10W	R1514	1-247-711-11		680	5%	1/4W F
R1443		METAL GLAZE		5%	1/10W	R1515		METAL OXIDE		5%	1W F
R1444	1-210-057-00	METAL GLAZE	2.2K	5%	1/10W	R1516		METAL GLAZE			. 1/10W
R1445	1-216-071-00	METAL GLAZE	8 216	5%	1/10W	R1517	1-210-109-00	METAL GLAZE	330K	5%	1/10W
R1446		METAL GLAZE		5%	1/10W	R1518	1-215-867-00	METAL OXIDE	470	5%	1W F
R1447		METAL GLAZE		5%	1/10W	R1519		METAL OXIDE		5%	iW F
R1448		METAL GLAZE		5%	1/10W	R1520		METAL GLAZE		5%	1/10W
R1449	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	R1521		METAL GLAZE		5%	1/10W
D1450						R1523	1-216-350-11	METAL OXIDE	1.2	5%	IW F
R1450		METAL GLAZE		5%	1/10W	D1504					
R1451 R1452		METAL GLAZE		5%	1/10W	R1524		METAL OXIDE		5%	IW F
R1452		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1525		METAL GLAZE		5%	1/10W
R1454		METAL GLAZE		5%	1/10W 1/10W	R1526 R1527	1-249-413-11	METAL GLAZE		5%	1/10W
11115-1	1 210 005 00	METAL OLIVEL	7.715	570	1/10 1	R1528		METAL OXIDE	470	5% 5%	1/4W F 1W F
R1455	1-216-113-00	METAL GLAZE	470K	5%	1/10W	141520	1-215-009-11	METAL OXIDE	110	370	IW F
R1456	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W	R1529	1-202-829-11	SOLID	8.2K	20%	1/2W
R1457	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R1530	1-216-115-00	METAL GLAZE		5%	1/10W
R1458		METAL GLAZE		5%	1/10W	R1531	1-247-697-11	CARBON	56	5%	1/4W F
R1459	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W	R1532	1-216-059-00	<b>METAL GLAZE</b>	2.7K	5%	1/10W
D1460	1 016 007 01	METAL OLAZE	1007		1 /1 0337	R1533	1-249-414-11	CARBON	560	5%	1/4W F
R1460 R1461		METAL GLAZE METAL CHIP	560	5% 0.50%	1/10W 1/10W	R1534	1 216 660 11	METAL CHIP	0.077	0.500	1 /1 0111
R1462			560	0.50%		HR1536		METAL CHIP	2.2K	0.50%	1/10W
R1463			560	0.50%	1/10W	R1537	1-249-389-11		4.7	5%	1/10W 1/4W F
R1464		METAL GLAZE		5%	1/10W	R1538		METAL GLAZE		5%	1/10W
						R1539		METAL GLAZE		5%	1/10W
R1465		METAL GLAZE		5%	1/10W						4M4U/E/A)
R1466		METAL GLAZE		5%	1/10W					•	·
R1467		METAL GLAZE		5%	1/10W	R1540		METAL GLAZE		5%	1/10W
R1468 R1469		METAL GLAZE		5%	1/10W	R1541		METAL GLAZE		5%	1/10W
K1409	1-210-037-00	METAL GLAZE	2.2K	5%	1/10W	R1542	1-247-692-71	CARBON	22	5%	1/4W F
R1470	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	R1543	1-216-027-00	METAL GLAZE	120	5%	4M4U/E/A) 1/10W
R1471		METAL GLAZE		5%	1/10W	R1547		METAL OXIDE		5%	3W F
R1472		METAL GLAZE		5%	1/10W		1 410 000 00		2.2	570	J W 1
R1473		METAL GLAZE		5%	1/10W	R1548	1-216-057-00	<b>METAL GLAZE</b>	2.2K	5%	1/10W
R1475	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	R1549	1-260-094-11	CARBON	390	5%	1/2W
R1476	1 216 062 01	METAL OLAZE	2.016	e.01	1 (10)	R1550		METAL GLAZE		5%	1/10W
R1477		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1551 R1552	1-249-393-11		10	5%	1/4W F
R1478		METAL GLAZE		5%	1/10W	K1332	1-210-091-00	METAL GLAZE	30K	5%	1/10W
R1480		METAL GLAZE		5%	1/10W	R1553	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R1481		METAL GLAZE		5%	1/10W	R1554		METAL GLAZE		5%	1/10W
						R1555		CONDUCTOR, C		5 /0	1,1011
R1482		METAL GLAZE		5%	1/10W	R1556		<b>METAL GLAZE</b>		5%	1/10W
R1483	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R1557	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R1484		METAL GLAZE		5%	1/10W						
R1485 R1486		METAL GLAZE METAL GLAZE		5% 5%	1/10W	R1558	1-249-393-11		10	5%	1/4W F
141700	1-210-097-91	MIETAL GLAZE	IOOK	370	1/10W	R1559 R1560	1-249-393-11	METAL GLAZE	10	5%	1/4W F
R1487	1-216-097-91	METAL GLAZE	100K	5%	1/10W	R1567		METAL GLAZE		5% 5%	1/10W 1/10W
R1488		METAL GLAZE		5%	1/10W	R1568		METAL GLAZE		5%	1/10W 1/10W
R1489	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W					5 10	111011
R1490		METAL GLAZE		5%	1/10W	R1569		<b>METAL GLAZE</b>		5%	1/10W
R1491	1-216-035-00	METAL GLAZE	270	5%	1/10W	R1570	1-216-073-00	METAL GLAZE	10K	5%	1/10W
D1400	1.014.004.00	1 CT 4 CT 4 CT	070		4 4 0	R1571		METAL GLAZE		5%	1/10W
R1492 R1493		METAL GLAZE METAL GLAZE		5%	1/10W	R1572		METAL GLAZE		5%	1/10W
R1494		METAL GLAZE		5% 5%	1/10W 1/10W	R1573	1-210-073-00	METAL GLAZE	10K	5%	1/10W
R1495		METAL GLAZE		5%	1/10W	R1574	1-216-041-00	METAL GLAZE	470	801	1/1037
R1496		METAL GLAZE		5%	1/10W	R1575		METAL GLAZE		5% 5%	1/10W 1/10W
						R1576		METAL GLAZE		5%	1/10W
R1498		METAL GLAZE		5%	1/10W	R1577		METAL GLAZE		5%	1/10W
R1499		METAL GLAZE		5%	1/10W	R1578	1-216-065-00	<b>METAL GLAZE</b>	4.7K	5%	1/10W
R1500			680	0.50%	1/10W	D					
R1501 R1502	1-216-075-00	METAL GLAZE	12K 3.3K	5%	1/10W 1/2W	R1579		METAL CHIP	39K	0.50%	1/10W
	1-200-103-11	CHINDON	J.J.1%	5%	112 W	R1580	1-210-089-91	METAL GLAZE	4/K	5%	1/10W
R1503	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W	R1581	1-208-612-11	METAL OXIDE	10M	5%	\$M4U/E(A) 1W
R1504	1-216-686-11	METAL CHIP	30K	0.50%	1/10W			OADE	- 0111		4M4U/E/A)
R1505	1-247-688-11		10	5%	1/4W F	R1582	1-208-610-11	METAL OXIDE	2M	5%	1W
R1506		METAL GLAZE		5%	1/10W	D1500	1 414 555 55			(14	M4U/E/A)
R1507	1-210-003-00	METAL GLAZE	4./K	5%	1/10W	R1583	1-212-998-00	FUSIBLE	470	5%	1/2W F
										(14	IM4U/E/A)



REF. NO.	PART NO.	DESCRIPTION		!	REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R1589 R1595		METAL OXIDE METAL GLAZE		5% 5%	3W F 1/10W	R2367	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R1596	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R2368	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1597		METAL GLAZE		5%	1/10W	R2369		METAL CHIP		0.50%	1/10W
R1598	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	R2371		METAL GLAZE		5%	1/10W
R1599	1-202-830-00	SOL ID	10K	20%	1000	R2372		METAL GLAZE		5%	1/10W
K1399	1-202-630-00	SOLID	IUK		1/2W 4M4U/E/A)	R2374	1-210-097-91	METAL GLAZE	100K	5%	1/10W
R2300	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	R2375	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2301		METAL GLAZE		5%	1/10W	R2376		METAL GLAZE		5%	1/10W
R2302		METAL CHIP	6.8K	0.50%	1/10W	R2377	1-216-033-00	<b>METAL GLAZE</b>	220	5%	1/10W
R2303	1-216-093-00	METAL GLAZE	68K	5%	1/10W	R2378		METAL GLAZE		5%	1/10W
R2304	1-216-105-01	METAL GLAZE	220K	5%	1/10W	R2379	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2305		METAL GLAZE		5%	1/10W	R2380	1-216-089-91	METAL GLAZE	ATK	5%	1/10W
R2306		METAL GLAZE		5%	1/10W	R2381		METAL GLAZE		5%	1/10W
R2307		METAL GLAZE		5%	1/10W	R2382		METAL GLAZE		5%	1/10W
R2308	1-216-103-00	METAL GLAZE	180K	5%	1/10W	R2383		METAL GLAZE		5%	1/10W
R2309	1-216-040-01	METAL GLAZE	117	5%	1/10W	R2384	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R2310		METAL GLAZE		5%	1/10W	R2385	1-216-073-00	METAL GLAZE	108	5%	1/10W
R2311		METAL GLAZE		5%	1/10W	R2386		METAL GLAZE		5%	1/10W
R2312	1-216-053-00	<b>METAL GLAZE</b>	1.5K	5%	1/10W	R2387		METAL GLAZE		5%	1/10W
R2313	1-216-049-91	METAL GLAZE	1K	5%	1/10W	R2388		METAL GLAZE	10K	5%	1/10W
R2314	1 216 646 11	METAL CHIP	560	0.50%	1/1007	R2389	1-216-033-00	METAL GLAZE	220	5%	1/10W
R2315		METAL CHIP	15K	0.50%	1/10W 1/10W	R2390	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R2316		METAL GLAZE		5%	1/10W	R2391		METAL CHIP		0.50%	1/10W
R2317		<b>METAL GLAZE</b>		5%	1/10W	R2392		METAL GLAZE		5%	1/10W
R2318	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	R2393		METAL GLAZE		5%	1/10W
R2319	1.216.002.00	METAL GLAZE	COV	5%	1/10W	R2394	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R2320		METAL CHIP	12K	0.50%	1/10W	R2396	1-216-041-00	METAL GLAZE	470	5%	1/10W
R2321		METAL GLAZE		5%	1/10W	R2397		METAL GLAZE		5%	1/10W
R2322		METAL GLAZE		5%	1/10W	R2398		METAL GLAZE		5%	1/10W
R2323	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	R2399	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2324	1-216-073-00	METAL GLAZE	1010	5%	1/10W	R2501	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R2325		METAL GLAZE		5%	1/10W	R2502	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R2326		METAL GLAZE		5%	1/10W	R2503		METAL GLAZE		5%	1/10W
R2327		METAL GLAZE		5%	1/10W	R2504	1-216-097-91	METAL GLAZE		5%	1/10W
R2328	1-216-049-91	METAL GLAZE	IK	5%	1/10W	D2504	1 216 101 00	METAL CLASS	1 6016		4M2U/E/A)
R2329	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	R2504	1-210-101-00	METAL GLAZE	150K	5%	1/10W
R2330		METAL GLAZE		5%	1/10W	R2551	1-216-091-00	METAL GLAZE	56K	5%	4M4U/E/A) 1/10W
R2331		METAL GLAZE		5%	1/10W						.,
R2332		METAL GLAZE		5%	1/10W	R2552		METAL GLAZE		5%	1/10W
R2333	1-210-089-91	METAL GLAZE	4/K	5%	1/10W	R2553 R2555		METAL GLAZE		5%	1/10W
R2334	1-216-041-00	METAL GLAZE	470	5%	1/10W	R2556		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R2335		METAL GLAZE		5%	1/10W	R2557		METAL GLAZE		5%	1/10W
R2336		METAL GLAZE		5%	1/10W						
R2337 R2338	1-216-037-00	METAL GLAZE METAL GLAZE	330	5%	1/10W	R2558	4 44 4 444 44	METAL GLAZE		5%	1/10W
R2336	1-210-073-00	MIETAL GLAZE	IUK	5%	1/10W	R2559 R2560		METAL GLAZE		5% 5%	1/10W
R2339	1-216-037-00	METAL GLAZE	330	5%	1/10W	R2561		METAL GLAZE		5%	1/10W 1/10W
R2340		METAL GLAZE		5%	1/10W	R2562		METAL GLAZE		5%	1/10W
R2341 R2342		METAL GLAZE METAL GLAZE		5%	1/10W	DOSCO	1 040 404 55	GARROS.			
R2343		METAL GLAZE		5% 5%	1/10W 1/10W	R2563 R3301	1-249-421-11	CARBON METAL GLAZE		5%	1/4W
	1 210 001 00	DITTE OLITEDE	2211	570	171011	R3302		METAL GLAZE		5% 5%	1/10W 1/10W
R2344		<b>METAL GLAZE</b>		5%	1/10W	R3303		METAL GLAZE		5%	1/10W
R2345			18K	0.50%	1/10W	R3304	1-216-065-00	<b>METAL GLAZE</b>		5%	1/10W
R2346 R2347		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	page	1 216 061 00	METAL OF ACT	2 2**	= 01	1 (1 0)***
R2348		METAL GLAZE		5%	1/10W	R3305 R3306		METAL GLAZE METAL GLAZE	_	5%	1/10W
	. 2.0 00. 00		JIJAL	370	1/1011	R3308		METAL GLAZE		5% 5%	1/10W 1/10W
R2349		METAL CHIP	15K	0.50%	1/10W	R3309		METAL GLAZE		5%	1/10W
R2350 R2351		METAL GLAZE		5%	1/10W	R3310	1-216-049-91	METAL GLAZE		5%	1/10W
R2352		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R3311	1_216_001_00	METAL CLASE	SEV	E 01	1/1000
R2353		METAL GLAZE		5%	1/10W	R3312	1-216-105-01	METAL GLAZE METAL GLAZE	220K	5% 5%	1/10W 1/10W
						R3317		METAL CHIP		0.50%	1/10W
R2354		METAL GLAZE		5%	1/10W	R3320	1-216-085-00	<b>METAL GLAZE</b>	33K	5%	1/10W
R2357		METAL GLAZE		5%	1/10W	R3323	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2358 R2361		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R3333	1_216 112 00	METAL GLAZE	470¥	5 OI	1/100
R2362		METAL GLAZE		5%	1/10W	R3334		METAL GLAZE		5% 5%	1/10W 1/10W
						R3335		METAL GLAZE		5%	1/10W
R2363		METAL GLAZE		5%	1/10W	R3337	1-216-099-00	<b>METAL GLAZE</b>	120K	5%	1/10W
R2364 R2365		METAL GLAZE METAL CHIP	33K	5% 0.50%	1/10W . 1/10W	R3338	1-216-103-00	METAL GLAZE	180K	5%	1/10W
R2366		METAL GLAZE		5%	1/10W	R3339	1-216-093-00	METAL GLAZE	68K	5%	1/10W
							. = -0 0/5-00	OLINEE	JUIL .	J 10	1,10 M



Les composants identifies par une trame et une marque \( \Delta\) sont critiques pour la securite. Ne les remplacer que par une piece portant la numero specifie.

The componants identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		]	REMARK
R3340 R3344 R3345 R3346	1-216-081-00 1-216-033-00	METAL GLAZE 120K METAL GLAZE 22K METAL GLAZE 220 METAL GLAZE 100	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	TP300 TP301	*1-535-877-22	<test pin=""> CHIP, CHECKE CHIP, CHECKE</test>	R		
R3347 R3348 R3349 R3350 R3351	1-216-025-91 1-216-025-91 1-216-113-00	METAL GLAZE 100 METAL GLAZE 100 METAL GLAZE 100 METAL GLAZE 470K METAL GLAZE 820K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	TP305 TP306 TP307 TP311 TP312	*1-535-877-22 *1-535-877-22 *1-535-877-22	CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE	R R R		
R3355 R3356 R3357 R3358 R3359	1-216-089-91 1-216-051-00 1-216-051-00 1-216-051-00	METAL GLAZE 47K METAL GLAZE 1.2K METAL GLAZE 1.2K METAL GLAZE 1.2K METAL GLAZE 22K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	TP401 TP402 TP403 TP501 TP502	*1-535-877-22 *1-535-877-22 *1-535-877-22	CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE	R R R		
R3360 R3361 R3362 R3363	1-216-073-00 1-216-089-91 1-216-049-91 1-216-049-91	METAL GLAZE 10K METAL GLAZE 47K METAL GLAZE 1K METAL GLAZE 1K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	TP503 TP504	*1-535-877-22	CHIP, CHECKE CHIP, CHECKE CHIP, CHECKE <crystal></crystal>	R		
R3364 R3376 R3377 R3378 R3381 R3382	1-216-081-00 1-216-107-00 1-216-115-00 1-216-041-00	METAL GLAZE 10K  METAL GLAZE 22K  METAL GLAZE 270K  METAL GLAZE 560K  METAL GLAZE 470  METAL CHIP 560	5% 5% 5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W 1/10W	X101 X300 X300 X301 X301	1-577-259-11 3-741-396-01 1-527-722-00	VIBRATOR, CE VIBRATOR, CR INSULATOR VIBRATOR, CR INSULATOR	YSTAL		
R3383 R3384 R3385 R3386	1-216-063-91 1-216-057-00 1-216-057-00	METAL GLAZE 6.8K METAL GLAZE 3.9K METAL GLAZE 2.2K METAL GLAZE 2.2K	5% 5% 5%	1/10W 1/10W 1/10W 1/10W	*****		**************************************	OMPLETE	nie nie nie nie nie nie nie nie	10 14 14 16 16 16 16 16 16 16 16 16 16 16 16 16
R3390 R3394 R3395 R3396 R3398 R4401	1-216-089-91 1-216-049-91 1-216-041-00 1-216-685-11	METAL GLAZE 2.2K  METAL GLAZE 47K  METAL GLAZE 1K  METAL GLAZE 470  METAL CHIP 27K  METAL GLAZE 33K	5% 5% 5% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/10W 1/10W		*4-374-846-11 4-382-854-11	HOLDER, FUSE COVER, CAPAC SCREW (M3X10 RUBBER, SILIC	E CITOR, CAI O), P. SW (+	)	)
R4402		METAL GLAZE 470K	5%	1/10W			<capacitor></capacitor>			
R4404 R4405 R4407 R4408	1-216-067-00 1-216-061-00	METAL GLAZE 10K METAL GLAZE 5.6K METAL GLAZE 3.3K METAL GLAZE 2.7K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	C602 C603 C604 C605	1-130-711-00 1-130-711-00 1-113-924-11 1-113-924-11	FILM CERAMIC	0.22MF 0.22MF 0.0047MF 0.0047MF		250V 250V 250V 250V
R4409 R4410 R4411 R4412 R4413	1-216-059-00 1-216-113-00 1-216-113-00	METAL GLAZE 2.7K METAL GLAZE 2.7K METAL GLAZE 470K METAL GLAZE 470K CONDUCTOR, CHIP	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	C606 C607 C608 C609	1-113-924-11 1-113-924-11 1-113-924-11 1-113-924-11	CERAMIC CERAMIC CERAMIC CERAMIC	0.0047MF 0.0047MF 0.0047MF 0.0047MF	20% 20% 20%	250 V 250 V 250 V 250 V 250 V
R4414 R4415 R4416	1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP			C610 C611 C612 C613	1-113-924-11 1-113-924-11 1-137-484-11 1-137-484-11	CERAMIC FILM	0.0047MF 0.0047MF	20% 10%	250V 250V 630V
RV501	1-223-102-00	<variable resistor=""> RES, ADJ, WIREWOUND 1</variable>	120		C614 C615 C616	1-129-718-00 1-136-619-11 1-107-909-11	FILM FILM	0.47MF 0.022MF 0.0016MF 47MF	10% 10% 3% 20%	630V 630V 2KV 35V
T300	1-406-781-11	<transformer></transformer>			C617 C618 C619 C621 C622	1-107-430-91 1-107-906-11 1-107-911-11 1-117-791-11	ELECT ELECT	0.0033MF 10MF 220MF 1000MF	10% 20% 20% 20%	1KV 50V 50V 160V
T500 T501 A	1-426-668-11 1-453-233-11 1-453-232-11	TRANSFORMER, FERRITE TRANSFORMER ASSY, FI TRANSFORMER ASSY, FI RING, SHORT	YBACK (14 YBACK	4M4U/E/A)	C623 C624 C625 C626 C627	1-102-038-00 1-107-900-51 1-102-038-00 1-107-900-51 1-102-038-00 1-107-900-51	ELECT CERAMIC ELECT CERAMIC	0.001MF 4700MF 0.001MF 4700MF 0.001MF 4700MF	20% 20% 20%	35V 500V 35V 500V 35V 500V 35V
T501 T502		SCREW +BVTP 4X16 TYPI TRANSFORMER, FERRITE	E (DFT)	4M4U/E/A)	C628 C629 C630 C631 C632	1-102-038-00 1-107-891-11 1-126-964-11 1-136-853-11 1-107-492-11	CERAMIC ELECT ELECT FILM	0.001MF 3300MF 10MF 0.56MF 47MF	20% 20% 5% 20%	500V 25V 50V 200V 160V
TH500	1-807-970-11	<thermistor> THERMISTOR</thermistor>			C633 C634 C636 C637	1-107-885-11 1-107-911-11 1-107-909-11 1-107-910-11	ELECT ELECT ELECT	3300MF 220MF 47MF 100MF	20% 20% 20% 20% 20%	16V 50V 50V 50V



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARI	K
C638	1-137-484-11	FILM	0.47MF	10%	630V	Q603	8-729-303-61	TRANSISTOR 2	SC3851-G			-
C2601	1-102-038-00	CERAMIC	0.001MF		500V			P=010=0P				
		-CONNECTOR-				D 601	1 202 710 00	<resistor></resistor>	114	200	1000	
CN601	*1_580_680_11	CONNECTOR: PIN, CONNECTOR:		ARD) 4	1P	R601 R602 R603		METAL OXIDE METAL OXIDE		20% 5% 5%	1/2W 3W 3W	F
	*1-695-561-11	PIN, CONNECT	OR (PC BO.	ARD)	7P	R604 R605	1-249-418-11 1-249-415-11	CARBON	1.2K 680	5% 5%	1/4W 1/4W	•
CN605	*1-573-964-11	PIN, CONNECTOR PLUG, CONNECTOR	OR (PC BO.			R606		WIREWOUND	0.15	10%	3W	F
CN607		PLUG, CONNEC				R607 R608	1-249-426-11 1-249-428-11	CARBON	5.6K 8.2K	5% 5%	1/4W 1/4W	-
CN609	1-508-786-00	PIN, CONNECT	OR (5mm P	ITCH)	2P	R609 R610	1-249-428-11 1-249-428-11		8.2K 8.2K	5% 5%	1/4W 1/4W	
		<diode></diode>				R611	1-249-417-11		1K	5%	1/4W	F
<b>D</b> 601		DIODE D4SB60				R612 R613	1-249-404-00 1-249-419-11	CARBON	82 1.5K	5% 5%	1/4W 1/4W	
D605 D606	8-719-988-55	DIODE EGP20G DIODE RGP15K	-6179			R614 R615	1-249-385-11 1-202-727-00		2.2 4.7M	5% 10%	1/4W 1/2W	F
D607 D608		DIODE RU-3AM DIODE 1SS119-				R617	1-202-933-61		0.1	10%	1/2W	F
D609		DIODE RU-3AM	1			R618 R619	1-202-933-61 1-202-933-61	FUSIBLE	0.1	10% 10%	1/2W 1/2W	F
D610 D612		DIODE D5L60 DIODE FML-G1	<b>2</b> S			R620 R621	1-202-933-61 1-215-877-11	FUSIBLE METAL OXIDE	0.1 22K	10% 5%	1/2W 1W	F F
D613 D614		DIODE EGP20G DIODE FML-G1				R622	1-249-401-11	CARBON	47	5%	1/4W	F
D615	8-710-070-85	DIODE EGP20G				R623 R626	1-249-417-11 1-247-895-91		1K 470K	5% 5%	1/4W 1/4W	
D616 D617	8-719-054-32	<b>DIODE ERA15-</b>	06			R627 R628	1-216-490-11	METAL OXIDE	39K	5% 5%	3W 3W	F
D618		DIODE RD16ES DIODE EGP20G				R629					1/2W	F
		-DEDDITE DE A	ъ.			R630		METAL OXIDE	4.7M 39K	10% 5%	3W	F F
T2D 401	1 410 206 41	<ferrite bea<="" td=""><td></td><td>D 0 45</td><td></td><td>R631 R632</td><td>1-249-412-11</td><td>CARBON</td><td>390 47</td><td>5% 5%</td><td>1/4W 1/4W</td><td>F</td></ferrite>		D 0 45		R631 R632	1-249-412-11	CARBON	390 47	5% 5%	1/4W 1/4W	F
FB601 FB602	1-410-396-41	FERRITE BEAD FERRITE BEAD	INDUCTO	R 0.45	UH	R1602	1-202-842-11		220K	20%	1/2W	
FB603 FB604	1-410-396-41	FERRITE BEAD FERRITE BEAD	INDUCTO	R 0.45	UH	R1603	1-202-842-11	SOLID	220K	20%	1/2W	
FB605		FERRITE BEAD						<relay></relay>				
FB606 FB607 FB608	1-410-396-41	FERRITE BEAD FERRITE BEAD FERRITE BEAD	INDUCTO	R 0.45	UH	RY601	1-515-738-11	RELAY				
FB609 FB610	1-410-397-21	FERRITE BEAD FERRITE BEAD	INDUCTO	R 1.1U	H			<transforme< td=""><td>en.</td><td></td><td></td><td></td></transforme<>	en.			
FB611		FERRITE BEAD				T601	1.426.716.11			TED A	ET)	
FB612 FB613	1-410-397-21	FERRITE BEAD FERRITE BEAD	INDUCTO	R 1.1U	H	T602 T603	1-426-716-11	TRANSFORMER TRANSFORMER TRANSFORMER	R, LINE FII	TER (L	FT)	
1.19013	1-410-397-21	PERRITE BEAL	INDUCTO	W 1.10		1003	1-451-245-11	TRANSFORME	C, CON VE	(IER (S	KI)	
		<ic></ic>						<thermistor< td=""><td>&gt;</td><td></td><td></td><td></td></thermistor<>	>			
IC601 IC601		SHEET, INSULA IC STR-M6524	ATING			THP601	1-808-059-31	THERMISTOR,	POSITIVE			
IC602 IC603		IC STR-S3115 IC NJM78M05F	A					<test pin=""></test>				
IC604	8-759-231-53	IC TA7805S				TP1601	1-536-354-00	POST PIN				
IC605	8-759-231-58	IC TA7812S										
		<coil></coil>				6 8 8		<varistor></varistor>				
L601		COIL, CHOKE 2					1-809-942-71 1-809-942-71					
L1601 L1602		INDUCTOR 270 COIL, CHOKE	UH									
L2601		COIL (WITH CO	ORE) 45UH			******		*******	******	*****	******	**
		<photo coup<="" td=""><td>LER&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></photo>	LER>									
PH601	8-749-923-50	PHOTO COUPL	ER PC111Y	rs.		8 8 8						
0.431	0 700 440 0 0	<transistor< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></transistor<>										
Q601	8-729-140-96	TRANSISTOR 2	SD774-34			•						



REF, NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION			DEMAR	v
**********	**********	A C BOARD, COMPLET		***************************************						REMAR	K.
		*********	** (PVM-1	14M4U/E/A)		8-729-119-78 8-729-200-17	TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2	SC2785-H SA1091-O	FE		
	* A-1331-631-A	A C BOARD, COMPLET			Q705	8-729-200-17	TRANSISTOR 2	SA1091-O	)		
	7-682-949-01	SCREW +PSW 3X10	(PVM-1	14M2U/E/A)	Q706 Q710 Q711	8-729-200-17	TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2	SA1091-0			
		<capacitor></capacitor>			Q712	8-729-200-17	TRANSISTOR 2	SA1091-0			
G701	1 100 1 5 00				Q713		TRANSISTOR 2				
C701 C702	1-102-157-00 1-102-157-00		10% 10%	500V 500V	Q714 Q715		TRANSISTOR 2 TRANSISTOR 2				
C703 C704	1-102-157-00 1-102-121-00		10% MF 10%	500V	Q716	8-729-119-78	<b>TRANSISTOR 2</b>	SC2785-H	FE		
C705	1-104-665-11		20%	50V 16V	Q717	8-729-119-78	TRANSISTOR 2	SC2785-H	FE		
C706	1-102-074-00	CERAMIC 0.001M	F 10%	50V			<resistor></resistor>				
C707 C708	1-162-116-00 1-136-601-11		10%	2KV	D.000						
C710	1-101-880-00		5% 5%	630V 50V	R702 R704	1-247-903-00 1-215-405-00		1M 220	5% 1%	1/4W 1/4W	
C711	1-101-880-00	CERAMIC 47PF	5%	50V	R705	1-215-405-00	METAL	220	1%	1/4W	
C712	1-101-880-00	CERAMIC 47PF	5%	50V	R706 R707	1-215-405-00 1-249-431-11		220 15K	1% 5%	1/4W 1/4W	
C713 C714	1-107-651-11		20%	250V							
C715	1-102-976-00 1-102-976-00		5% 5%	50V 50V	R708 R709	1-249-431-11 1-249-431-11	CARBON	15K 15K	5% 5%	1/4W 1/4W	
C716	1-102-976-00		5%	50V	R710	1-215-391-00	METAL	56	1%	1/4W	
C717	1-107-372-11	MYLAR 0.22MF	10%	200V	R711 R712	1-215-394-00 1-215-392-00		75 62	1% 1%	1/4W 1/4W	
C718 C720	1-107-372-11	MYLAR 0.22MF	10%	200V				02	176 .	1/4 W	
C734	1-106-383-00 1-102-973-00		F 10% 5%	200V 50V	R715 R716	1-202-818-00	SOLID METAL OXIDE	1K	20% 5%	1/2W	17
C735	1-102-816-00		5%	50V	R717	1-202-818-00	SOLID	1K	20%	3W 1/2W	F
C736	1-102-816-00	CERAMIC 120PF	5%	50V	R718 R719	1-216-486-00 1-202-818-00	METAL OXIDE	8.2K 1K	5% 20%	3W 1/2W	F
C740	1-162-114-00		AF .	2KV					20%	172 W	
			(1	4M4U/E/A)	R720 R722	1-216-486-00 1-202-838-00	METAL OXIDE	8.2K 100K	5% 20%	3W 1/2W	F
		COMPOSOR.								4M4U/E	(A)
		<connector></connector>			R722	1-202-883-11	SOLID	680K	20%	1/2W 4M2U/E	(A)
CN701 CN702	* 1-564-511-11 * 1-573-064-11	PLUG, CONNECTOR 8P PIN, CONNECTOR (PC 1	O ARD) 6		R723	1-202-838-00		100K	20%	1/2W	( A)
CN703	1-695-915-11	TAB (CONTACT)			R724	1-202-842-11	SOLID	220K	20%	1/2W	
CN704	1-695-915-11	TAB (CONTACT) (14M4	U/E/A)		R725	1-202-719-00	SOLID	1M	20%	1/2W	
		DIODE			R725	1-202-883-11	SOLID	680K	20%	4M2U/E 1/2W	/A)
		<diode></diode>			R731	1-247-815-91	CAPRON	220		4M4U/E	/A)
D701		DIODE 188119-25			R732	1-247-815-91	CARBON	220	5% 5%	1/4W 1/4W	
D702 D703		DIODE 1SS119-25 DIODE 1SS119-25			R733	1-247-815-91	CARBON	220	5%	1/4W	
D704 D705	8-719-911-19	DIODE 1SS119-25			R734	1-249-409-11	CARBON	220	5%	1/4W	F
D103	8-/19-911-19	DIODE 1SS119-25			R735 R736	1-249-409-11 1-249-409-11		220 220	5%	1/4W	F
D706	8-719-911-19	DIODE 188119-25			R737	1-247-807-31	CARBON	100	5% 5%	1/4W 1/4W	r
D707 D708	8-719-901-83	DIODE 1SS83 DIODE 1SS83			R738	1-247-807-31	CARBON	100	5%	1/4W	
D709 D713	8-719-901-83	DIODE 1SS83			R739	1-247-807-31		100	5%	1/4W	
	0-117-411-03	DIODE 1SS83			R740 R741	1-249-429-11 1-249-429-11		10K 10K	5% 5%	1/4W 1/4W	F
D715		DIODE 18883			R742	1-249-429-11	CARBON	10K	5%	1/4W	
D716 D717		DIODE 1SS83 DIODE 1SS83			R744	1-249-429-11	CARBON	10K	5%	1/4W	
				İ	R745	1-249-429-11	CARBON	10K	5%	1/4W	
		<jack></jack>			R746 R747	1-215-879-11 1-247-725-11	METAL OXIDE	47K 10K	5% 5%	1W 1/4W	F F
J701	1 261 116 11	COCKET DICTION WIN	F /2 43 4 4 4 7 1	<b>T</b> (1)	R748	1-249-923-11	CARBON	1K	5%	1/4W	F
J701	1-526-819-11	SOCKET, PICTURE TUB SOCKET, PICTURE TUB	E (14M4U) E (14M2U)	/E/A) /E/A)	R749	1-215-902-11	METAL OXIDE	47K	5%	2W	F
			,		R750	1-249-400-11		39	5%	1/4W	F
		<coil></coil>			R751 R752	1-247-887-00 1-247-887-00	CARBON CARBON	220K 220K	5% 5%	1/4W 1/4W	
L701	1_410_667_21	INDUCTOR 22UH			R753	1-247-887-00		220K	5%	1/4W 1/4W	
L705	1-412-532-11	INDUCTOR 39UH (14M2									
L705	1-412-534-31	INDUCTOR 56UH (14M4	U/E/A)	# # # # # # # # # # # # # # # # # # #			<variable re<="" td=""><td>SISTOR&gt;</td><td></td><td></td><td></td></variable>	SISTOR>			
		OTD A MIGROTTON		•	RV707	1-230-641-11	RES, ADJ, META	L GLAZE	2.2M		
		<transistor></transistor>		1	RV708		RES, ADJ, META		(1,	4M2U/E/	/ <b>A</b> )
Q701	8-729-119-78	TRANSISTOR 2SC2785-I	<b>IFE</b>	ŧ	AX 7 / UO	1-230-019-11	ALO, ADJ, META	L ULAZE		4M2U/E/	(A)
									ν-		,

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Replace only with part number specified.

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REF. NO. PART	NO. DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		R	EMARK
	714-11 RES, ADJ, MET 641-11 RES, ADJ, MET <spark gap=""></spark>	FAL GLAZE 2.21		\$2102 \$2103 \$2104 \$2105	1-570-101-41 1-570-101-41	SWITCH, KEY E SWITCH, KEY E SWITCH, KEY E SWITCH, KEY E	BOARD BOARD		
SG702 1-519- SG703 1-519-	422-11 GAP, SPARK ( 422-11 GAP, SPARK ( 422-11 GAP, SPARK ( 422-11 GAP, SPARK (	14M4U/E/A) 14M4U/E/A) 14M4U/E/A)		\$2106 \$2107 \$2108 \$2109 \$2110	1-570-969-11 1-570-101-41 1-570-101-41	SWITCH, KEY E SWITCH, KEY E SWITCH, KEY E SWITCH, KEY E SWITCH, KEY E	BOARD BOARD BOARD		
	**************************************	OMPLETE	******	S2111 S2112 S2113 S2114	1-570-101-41 1-570-969-11	SWITCH, KEY E SWITCH, KEY E SWITCH, KEY E SWITCH, KEY E	OARD OARD		
* 4-348-	208-00 HOLDER, LED			******	*****	******	******	****	*****
	<connector< td=""><td>&gt;</td><td></td><td></td><td>* A-1388-193-A</td><td>JBOARD, CON</td><td>MPLETE</td><td></td><td></td></connector<>	>			* A-1388-193-A	JBOARD, CON	MPLETE		
CN105 *1-564- CN106 *1-564-	527-11 PLUG, CONNE 526-11 PLUG, CONNE	CTOR 12P CTOR 11P				<connector></connector>			
	<diode></diode>			CN608	* 1-695-561-11	PIN, CONNECTO	OR (PC BOAL	RD) 7P	
	920-05 DIODE SLP281					<switch></switch>			
	812-32 DIODE TLY123 991-33 DIODE 1SS133			S601 .	∆ 1-692-921-11	SWITCH, PUSH	(A.C. POWE	R)	
	<resistor></resistor>			******	********	******	******	****	*****
R2107 1-249- R2136 1-249- R2137 1-249-	419-11 CARBON 430-11 CARBON 414-11 CARBON 414-11 CARBON 414-11 CARBON	1.5K 5% 12K 5% 560 5% 560 5% 560 5%	1/4W 1/4W 1/4W		* A-1390-704-A	X BOARD, CO			
R2139 1-249- R2140 1-249- R2141 1-249- R2142 1-249-	414-11 CARBON 414-11 CARBON 414-11 CARBON 414-11 CARBON 414-11 CARBON	560 5% 560 5% 560 5% 560 5% 560 5%	1/4W 1/4W 1/4W 1/4W	CN108	* 1-564-518-11	<connector> PLUG, CONNEC <diode></diode></connector>			
R2145 1-249- R2147 1-215- R2148 1-215-	414-11 CARBON 414-11 CARBON 427-00 METAL 419-00 METAL 414-00 METAL	560 5% 560 5% 1.8K 1% 820 1% 510 1%	1/4W 1/4W 1/4W	D001 D002 D003 D004	8-719-023-78 8-719-023-78	DIODE SEL3810 DIODE SEL3810 DIODE SEL3810 DIODE SEL3810	DLC05 DLC05		
	409-00 METAL 407-00 METAL	330 1% 270 1%		*******	******	******	*******	****	*****
R2153 1-215-	404-00 METAL 401-11 METAL	200 1% 150 1%	1/4W		* A-1390-705-A	S BOARD, CO	MPLETE		
	399-00 METAL 397-00 METAL	120 1% 100 1%				******		-14M2	U/14M4U)
R2156 1-215- R2157 1-215- R2158 1-215-	421-00 METAL 416-00 METAL 410-00 METAL 405-00 METAL	1K 1% 620 1% 360 1%	1/4W 1/4W 1/4W	C805	1-102-978-00			%	50V
	421-00 METAL	220 1% 1K 1%		C806 C807 C810	1-136-165-00 1-130-477-00 1-136-165-00	MYLAR FILM	0.0033MF 5 0.1MF 5	%	50V 50V 50V
	<variable r<="" td=""><td>ESISTOR&gt;</td><td></td><td>C811 C812</td><td>1-136-165-00 1-136-495-11</td><td></td><td></td><td>% %</td><td>50V 50V</td></variable>	ESISTOR>		C811 C812	1-136-165-00 1-136-495-11			% %	50V 50V
R V2103 1-225-	238-21 RES, VAR, CAI 385-11 RES, VAR, CAI 385-11 RES, VAR, CAI	RBON 20K RBON 20K		C813 C818	1-124-261-00 1-136-165-00	ELECT	10MF 2	% 0% %	50V 50V
RV2109 1-225-	385-11 RES, VAR, CAI 385-11 RES, VAR, CAI	RBON 20K				<connector></connector>			
	238-21 RES, VAR, CAI			CN801	* 1-573-896-11	SOCKET, CONN	ECTOR 12P		
	<switch></switch>					<coil></coil>			
S2101 1-570-	101-41 SWITCH, KEY	BOARD		L801	1-410-470-11	INDUCTOR 10U	Н		



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	REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
			<resistor></resistor>				C2447	1-124-234-00		22MF	20%	16V
	R802	1-249-435-11	CARBON	33K	5%	1/4W	C2448 C2449	1-124-234-00 1-124-234-00		22MF 22MF	20% 20%	16V 16V
	R803	1-247-863-91	CARBON	22K	5%	1/4W						
	R804 R805	1-215-454-00 1-215-461-00		24K 47K	1% 1%	1/4W 1/4W	C2450 C2451	1-124-234-00 1-124-589-11		22MF 47MF	20% 20%	16V 16V
	R808	1-249-417-11		1K	5%	1/4W	C2452	1-124-589-11	ELECT	47MF	20%	16V
	R812	1-249-417-11		1K	5%	1/4W	C2454 C2461	1-126-163-11 1-165-319-11	CERAMIC CHIP	4.7MF 0.1MF	20%	25V 50V
	R813 R815	1-249-417-11 1-247-843-11		1K 3.3K	5% 5%	1/4W 1/4W	C2462	1-165-310-11	CERAMIC CHIP	O IME		50V
	R816	1-249-418-11	CARBON	1.2K	5%	1/4W	C2463	1-165-319-11	<b>CERAMIC CHIP</b>	0.1MF		50V
	R817	1-249-418-11	CARBON	1.2K	5%	1/4W	C2464 C2465		CERAMIC CHIP CERAMIC CHIP			50V 50V
	R818 R819	1-249-418-11 1-249-418-11		1.2K 1.2K	5% 5%	1/4W 1/4W	C2466		CERAMIC CHIP			50V
	R820	1-249-422-11		2.7K	5%	1/4W	C2467		CERAMIC CHIP			50V
,							C2468 C2469		CERAMIC CHIP CERAMIC CHIP			50V 50V
	***	***		****		*******	C2470		CERAMIC CHIP			50V
	and the street of the street.	*****		******		********						
		1-537-735-14	TERMINAL BOA						<connector></connector>			
					(	(Q BOARD)	CN306	1-564-526-11	PLUG, CONNEC	TOR 11P		
		2-990-241-02	HOLDER (A), F	PLUG			CN307 CN308		PLUG, CONNEC PLUG, CONNEC			
		3-178-213-21	SCREW +P 3X1	10	CLIT		CN2401 4	1-251-263-11	INLET, AC			
		7-685-135-19	SCREW +P 2.62	XIO TYPE2	SLIT		CN2402	1-565-167-12	TERMINAL, (S)	(WITH SW	) 4P	
			<capacitor></capacitor>				CN2403	1-569-578-11	TERMINAL, S (V CONNECTOR, M	VITH SW)		
	C2401	1 1/2 111 00		6 CD.T.	***		CN2404	1-704-072-11	CONNECTOR, W	IUL II ZUF		
	C2401 C2402	1-103-111-00	CERAMIC CHIP ELECT	10MF	5% 20%	50V 16V			<diode></diode>			
	C2403 C2404	1-104-396-11 1-104-396-11		10MF 10MF	20%	16V	D2402	0 710 016 74				
	C2405	1-124-589-11		47MF	20% 20%	16V 16V	D2402 D2404		DIODE 1SS352 DIODE 1SS226			
	C2406	1-104-396-11	ELECT	10MF	20%	16V	D2405 D2406		DIODE 1SS226 DIODE 1SS226			
	C2407	1-104-396-11	ELECT	10MF	20%	16V	D2407		DIODE 188226			
	C2408 C2409	1-104-396-11 1-124-234-00		10MF 22MF	20% 20%	16V 16V	D2408	8-719-800-76	DIODE 1SS226			
	C2410	1-163-033-91	CERAMIC CHIP	0.022MF		50V	D2409	8-719-800-76	DIODE 1SS226			
	C2411	1-104-396-11		10MF	20%	16V	D2410 D2411		DIODE 1SS226 DIODE 1SS226			
	C2412 C2413	1-104-396-11	ELECT CERAMIC CHIP	10MF 100PF	20% 5%	16V 50V	D2415	8-719-800-76	DIODE 1SS226			
	C2414	1-126-301-11	ELECT	1MF	20%	50V	D2416		DIODE 1SS226			
	C2415	1-105-319-11	CERAMIC CHIP	0.1MF		50V	D2417 D2418		DIODE 1SS226 DIODE 1SS226			
	C2416 C2418	1-124-589-11	ELECT CERAMIC CHIP	47MF	20%	16V 50V	D2420 D2421	8-719-037-53	<b>DIODE RD27SB-</b>			
	C2422	1-124-234-00	ELECT	22MF	20%	16V			DIODE RD27SB-			
	C2423 C2424	1-124-234-00 1-163-033-91	CERAMIC CHIP	22MF 0.022MF	20%	16V 50V	D2422 D2423		DIODE RD27SB- DIODE RD27SB-			
	C2425	1-124-589-11			200			0 /15 05/ 05	DIODE ROLIOD	••		
	C2426	1-124-589-11	ELECT	47MF	20% 20%	16V 16V			<ic></ic>			
	C2427 C2428	1-124-234-00 1-163-033-91	ELECT CERAMIC CHIP	22MF 0.022MF	20%	16V 50V	IC2401	8-759-509-71	IC XRU4021BF-E	32.		
	C2429	1-124-234-00		22MF	20%	16V	IC2402	8-759-509-71	IC XRU4021BF-E			
	C2430		CERAMIC CHIP	0.022MF		50V	IC2403 IC2404		IC MM1113XFF IC MM1111XF			
	C2431 C2432	1-124-234-00 1-124-234-00		22MF 22MF	20% 20%	16V 16V	IC2405	8-759-287-89	IC MM1113XFF			
	C2433	1-163-033-91	<b>CERAMIC CHIP</b>	0.022MF		50V						
	C2434	1-124-463-00	ELECT	0.1MF	20%	50V			<jack></jack>			
	C2435 C2436	1-163-033-91	CERAMIC CHIP	0.022MF 22MF	20%	50V	J2401		CONNECTOR, C		BNC)	
	C2437	1-163-033-91	<b>CERAMIC CHIP</b>	0.022MF		16V 50V	J2402 J2403	1-562-261-71	BNC (WITH SW) CONNECTOR, C	OAXIAL (I	BNC)	
	C2438 C2439	1-124-234-00 1-124-234-00		22MF 22MF	20% 20%	16V 16V	J2404 J2405	1-766-738-11	BNC (WITH SW) CONNECTOR, C			
	C2440		CERAMIC CHIP			50V				·	JITC)	
	C2441	1-124-234-00	ELECT	22MF	20%	16V	J2406 J2407	1-562-261-71	BNC (WITH SW) CONNECTOR, C	OAXIAL (I	BNC)	
	C2442 C2443	1-124-234-00 1-124-234-00		22MF 22MF	20% 20%	16V 16V	J2408 J2409	1-766-738-11	BNC (WITH SW) CONNECTOR, C		-,	
	C2444	1-124-234-00		22MF	20%	16V	J2410		BNC (WITH SW)		) ( )	
	C2445		CERAMIC CHIP			50V	J2411	1-562-261-71	CONNECTOR, C	OAXIAL (I	BNC)	
	C2446	1-163-033-91	CERAMIC CHIP	0.022MF		50V 1	J2412	1-766-738-11	BNC (WITH SW)	(-		



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
J2413 J2414 J2415	1-507-802-41	JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE)		R2417 R2418 R2419 R2420	1-216-089-91 1-216-073-00	METAL GLAZE 10K METAL GLAZE 47K METAL GLAZE 10K METAL GLAZE 47K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
J2416 J2417 J2418 J2419 J2420	1-507-802-41 1-507-802-41 1-507-802-41	JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE)		R2421 R2422 R2423	1-216-073-00 1-216-089-91 1-216-073-00	METAL GLAZE 10K METAL GLAZE 47K METAL GLAZE 10K	5% 5% 5%	1/10W 1/10W 1/10W
J2420	1-307-802-41	JACK, PIN (MOUNT TYPE) <chip conductor=""></chip>		R2424 R2425 R2426	1-216-073-00 1-214-775-00		5% 5% 1%	1/10W 1/10W 1/4W
JR1 JR4 JR5 JR7	1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		R2427 R2428 R2429 R2430 R2431	1-216-105-91 1-216-025-91 1-216-115-00	METAL GLAZE 100K METAL GLAZE 220K METAL GLAZE 100 METAL GLAZE 560K	5% 5% 5%	1/10W 1/10W 1/10W 1/10W
JR12 JR13	1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP		R2432	1-214-775-00		5% 1%	1/10W
JR14 JR15 JR16 JR17	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		R2433 R2434 R2435 R2436	1-216-105-91 1-216-025-91 1-216-115-00	METAL GLAZE 100K METAL GLAZE 220K METAL GLAZE 100 METAL GLAZE 560K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
JR19 JR20 JR21 JR23	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		R2437 R2438 R2439 R2440 R2441	1-216-077-00 1-214-775-00 1-216-105-91	CONDUCTOR, CHIP METAL GLAZE 15K METAL 82K METAL GLAZE 220K METAL GLAZE 100K	5% 1% 5% 5%	1/10W 1/4W 1/10W 1/10W
JR30 JR34 JR35 JR40	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		R2442 R2443 R2444 R2446	1-216-115-00 1-216-077-00 1-214-775-00		5% 5% 5% 1%	1/10W 1/10W 1/10W 1/4W
JR41 JR43	1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP		R2447 R2448	1-216-097-91	METAL GLAZE 220K METAL GLAZE 100K	5% 5%	1/10W 1/10W
JR46 JR47 JR48 JR52 JR60	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		R2449 R2450 R2451 R2452	1-216-115-00 1-216-077-00	METAL GLAZE 100 METAL GLAZE 560K METAL GLAZE 15K METAL GLAZE 47K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
		<transistor></transistor>		R2453 R2455 R2458	2-216-113-00 1-216-295-91	METAL GLAZE 10K METAL GLAZE 470K CONDUCTOR, CHIP	5% 5%	1/10W 1/10W
Q2401 Q2402	8-729-216-22	TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SA1162-G		R2463 R2465	1-216-073-00	METAL GLAZE 33K METAL GLAZE 10K	5% 5%	1/10W 1/10W
Q2403 Q2404 Q2405	8-729-216-22 8-729-216-22	TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G		R2466 R2467 R2470 R2471	1-216-073-00 1-214-702-00 1-216-093-00	METAL GLAZE 68K	5% 5% 1% 5%	1/10W 1/10W 1/4W 1/10W
Q2408 Q2409 Q2410 Q2411 Q2412	8-729-120-28 8-729-120-28 8-729-120-28	TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6		R2472 R2473 R2474 R2475	1-216-037-00 1-216-049-91	METAL GLAZE 330 METAL GLAZE 1K METAL GLAZE 56K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
Q2414 Q2415	8-729-120-28 8-729-120-28	TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6		R2476 R2477	1-214-702-00 1-216-091-00	METAL 75 METAL GLAZE 56K	10% 5%	1/4W 1/10W
Q2416 Q2417		TRANSISTOR 2SA1162-G TRANSISTOR 2SC1623-L5L6		R2478 R2479 R2480 R2481	1-216-027-00 1-216-049-91 1-216-093-00	METAL GLAZE 3.9K METAL GLAZE 120 METAL GLAZE 1K METAL GLAZE 68K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R2401	1-216-073-00	<resistor> METAL GLAZE 10K 5%</resistor>	1/10W	R2482 R2483	1-214-702-00		1%	1/4W
R2402 R2404 R2405 R2406	1-216-043-91 1-216-089-91 1-216-073-00	METAL GLAZE 560 5% METAL GLAZE 47K 5% METAL GLAZE 10K 5% METAL GLAZE 47K 5%	1/10W 1/10W 1/10W 1/10W	R2484 R2485 R2486 R2487	1-216-027-00 1-216-063-91 1-216-049-91	METAL GLAZE 56K METAL GLAZE 120 METAL GLAZE 3.9K METAL GLAZE 1K METAL GLAZE 68K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R2407 R2408 R2409 R2410 R2411	1-216-089-91 1-216-073-00 1-216-089-91	METAL GLAZE 10K 5% METAL GLAZE 47K 5% METAL GLAZE 10K 5% METAL GLAZE 47K 5% METAL GLAZE 10K 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R2488 R2489 R2490 R2491 R2492	1-216-063-91 1-216-027-00	METAL 75 METAL GLAZE 56K METAL GLAZE 3.9K METAL GLAZE 120 METAL GLAZE 1K	1% 5% 5% 5% 5%	1/4W 1/10W 1/10W 1/10W 1/10W
R2412 R2413 R2414 R2415 R2416	1-216-073-00 1-216-089-91 1-216-073-00	METAL GLAZE 47K 5% METAL GLAZE 10K 5% METAL GLAZE 47K 5% METAL GLAZE 10K 5% METAL GLAZE 47K 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R2493 R2494 R2495 R2496 R2497	1-214-702-00 1-214-702-00 1-216-091-00		5% 1% 1% 5% 5%	1/10W 1/4W 1/4W 1/10W 1/10W

## PVM-14M2U/14M4U/14M2E PVM-14M4E/14M2A/14M4A



REF. NO. PART NO. DESCRIPTION REMARK R2498 1-216-037-00 METAL GLAZE 330 1/10W 1-216-049-91 METAL GLAZE 1K 5% R2499 1/10W R3400 1-216-093-00 METAL GLAZE 68K 1/10W 1-216-091-00 METAL GLAZE 56K R3402 5% 1/10W R3404 1-216-063-91 METAL GLAZE 3.9K 5% 1/10W 1/10W R3405 1-216-037-00 METAL GLAZE 330 R3406 1-216-049-91 METAL GLAZE 1K 1/10W R3408 1-216-093-00 METAL GLAZE 68K 5% 1/10W R3409 1-214-702-00 METAL 75 1% 1/4W 1-216-091-00 METAL GLAZE 56K 1/10W 5% R3410 1-216-063-91 METAL GLAZE 3.9K 5% 1/10W R3411 1-216-037-00 METAL GLAZE 330 5% R3412 1/10W 5% R3413 1-216-073-00 METAL GLAZE 10K 1/10W R3414 1-216-073-00 METAL GLAZE 10K 5% 1/10W 5% 1/10W R3416 1-216-049-91 METAL GLAZE 1K 1/10W R3417 1-216-093-00 METAL GLAZE 68K 1-214-702-00 METAL 75 1-216-037-00 METAL GLAZE 330 1-216-023-00 METAL GLAZE 82 R3418 1% 1/4W 5% 5% 5% R3419 R3420 1/10W 1/10W R3421 1-216-689-11 METAL GLAZE 39K 1/10W R3422 1-216-049-91 METAL GLAZE 1K 5% 1/10W 1-216-083-00 METAL GLAZE 27K 1-216-049-91 METAL GLAZE 1K 1-216-061-00 METAL GLAZE 3.3K 5% 5% R3423 R3424 1/10W 1/10W R3425 5% 1/10W R3426 1-216-099-00 METAL GLAZE 120 1-216-089-91 METAL GLAZE 47K 1-216-073-00 METAL GLAZE 10K 1-216-089-91 METAL GLAZE 47K 1-216-073-00 METAL GLAZE 10K 5% 1/10W R3427 5% 5% R3428 1/10W R3429 1/10W R3430 5% 1/10W R3431 1-216-089-91 METAL GLAZE 47K 1/10W R3432 1-216-073-00 METAL GLAZE 10K 1-216-045-91 METAL GLAZE 680 1-216-045-91 METAL GLAZE 680 5% 1/10W R3435 5% 1/10W 5% 5% R3436 1/10W R3437 1-216-045-91 METAL GLAZE 680 1/10W R3438 1-216-045-91 METAL GLAZE 680 5% 1/10W 1/10W R3439 1-216-045-91 METAL GLAZE 680 <SWITCH> S2401 1-570-598-11 SWITCH, DIP

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie. The components identified by shading and mark  $\hat{\Lambda}$  are critical for safety.

Replace only with part number specified.

	MISCELLANE	OTTO
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-223-417-11	RESISTOR AS	SY (HIGH-VOLTAGE) (14M4U/E/A
		INETIZATION
451-457-11	DEFLECTION	YOKE (14M4U/E/A)
-452-032-00 -452-094-00	MAGNET, DIS	ratable disk ; 15mmø
-370-231-11 -500-010-11	CORD SET PO	4A/20UV XVED (14M7E/A 14M4E/A)
-765-268-11	CORD, CONNI	ECTION
-765-718-11	CORD SET, PO	WER (14M2U/14M4U)
-738-333-05	PICTURE TUB	IE 14MT1 (L-BVM, PVM) (14M4E/A
-738-335-05	PICTURE TUB	E 14MT3(L-BVM, PVM)
-738-342-05	PICTURE TUB	(14M4U) E 14MG(DARK) (14M2U/E/A)
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-859-663-12	MANUAL, INS	STRUCTION (14M2E/14M4E only
-859-663-22	MANUAL, INS	
-044-040-03	LABEL, TALL	Y
-058-820-01	INDIVIDUAL	CARTON
-381-155-01	BAG, PROTEC	CTION
		,
	426-442-21 -451-457-11 -452-032-00 -452-094-00 -544-063-12 -576-231-11 -765-268-11 -765-718-11 -451-472-11 -738-333-05 -738-342-05 -738-342-05 -738-363-12 -859-663-12 -859-663-22 -044-040-03 -058-820-01	426-442-21 COIL DEMAC 451-457-11 DEFLECTION 452-032-00 MAGNET,DIS 452-094-00 MAGNET,ROT -544-063-12 SPEAKER -576-231-11 FUSE (H.B.C.) -590-910-11 CORD SET, PC -765-268-11 CORD, CONN -765-718-11 CORD SET, PC -451-472-11 DEFLECTION -738-333-05 PICTURE TUE